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The Fall of Silicon Valley Bank • Can ChatGPT clear an actuarial exam? • **Actuarial Science in Uganda** • The Evolution of the Actuary • **Getting To Know Your Student Rep** • Rise of the Short-Term Actuary



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LETTER FROM THE CHIEF EDITOR

MICHAEL TICHAREVA

In 2022, we ended on a high note with the third edition of the 2022 **South African Actuary** publication released in October, where we published various articles covering both technical and non-technical content.

In this first edition of the 2023 publication, we bring you more technical and non-technical insightful articles that will, hopefully, stimulate you and encourage debate. We will always appreciate your feedback as you read and analyse various views and opinions presented in the SA Actuary. If you were not disappointed with our previous publications, this edition will not disappoint you either!

In a constantly changing global environment, always expect surprises. We have recently seen the demise of the high-profile Silicon Valley Bank in the US alongside the smaller Signature Bank. These are regarded as the second and third largest bank failures, respectively, in US history. Elsewhere in Europe, we have also seen Credit Suisse being bailed out by the Swiss banking regulator, and an engineered takeover of Credit Suisse by the stronger UBS to bring back confidence in the financial system. We have included an article to cover these issues, showcasing how actuaries should continue to develop skills in the measurement and management of banking risks. This does not imply that actuaries can stop bank failures, but with the actuarial toolkit having been proven to be suitable in managing various risks in a wide range of organisations, our involvement in banking could assist in the management of banking risks by adding to the already existing skills from other professionals. More is better, I would say – the more we collaborate with other professionals, the more we should be able to design suitable, practical, and sustainable solutions as a collective.

Then we have the topical issue of ChatGPT, an artificial intelligence assistant designed to provide information and answer questions on a wide range of topics. **Rowan Kuppasamy** and **Malwande Nkonyane** address this interesting topic as they

ask the question “could ChatGPT clear an actuarial exam?”. **Rowan** and **Malwande** conducted an experiment using the Actuarial Risk Management exam, testing if ChatGPT could, indeed, pass this exam. You can read this interesting article yourself to see if ChatGPT can really pass an actuarial exam. The world is certainly changing, and change remains the only constant around us.

Arthur Els, a senior retired actuary who was the first to qualify as a CERA when it was introduced by ASSA, and who has been actively engaging in wider fields applying actuarial skills, advises us on 5 rules that he believes every actuary should observe. These 5 rules are: protect your good reputation at all costs, be accountable, push the actuarial frontiers, learn from the setbacks and push on, and stay relevant. Whilst these are not the only rules Arthur recognises, he believes that these 5 are amongst the most important for success as an actuary. Both younger and older actuaries can certainly take a leaf from Arthur’s advice.

We continue with our profiling of role models in business and the actuarial profession with **Lydia Mutepefa**, a member of the SA Actuary editorial team, interviewing the ASSA CEO, **Mike McDougall**, and a proven global leader, **Karabo Morule**. These leaders share great insights about their history that should, hopefully, influence our young actuaries as they navigate their actuarial, business, and life journeys. There is always something to learn from those who have walked the road before you, so please pay attention to these great profiles.

As for previous editions, this edition is loaded with many other

Finally, ASSA turns 75 in 2023, yes, 75 years it is!

great articles on various topics from various contributors from both South Africa and across the globe. With the actuarial profession being global, we have international contributors from the US, the UK, the Caribbean, and the African continent who share great insights from their jurisdictions and experiences. We can only thrive through sharing information, formulating views and opinions, and debating issues for better outcomes. We seek to do just that in what we bring through the SA Actuary.

Finally, ASSA turns 75 in 2023, yes, 75 years it is! This is probably time to reflect on our history as we forge ahead into the future. We bring you a timeline of events and some of the most significant milestones over those 75 years. As you would appreciate, all developments in any community are made possible by the participation of community members, so you have a great role to play as a member of the actuarial community, and a big shoe to fill as we continue to make ASSA and the actuarial profession great going into the future. ASSA has certainly been punching above its weight both locally and globally – and thanks to our members who make it possible through their unwavering support!

I will now let you read the rest of the publication, and until next time, please keep well!

Michael Tichareva
Lead Editor, on behalf of the Editorial Team

A PRESIDENTIAL PERSPECTIVE

He truly was a giant in the Actuarial Profession in South Africa and indeed the world.

It always amazes me how diverse our profession has become and where our members find gainful employment. This SA Actuary is indeed a showcase of that, from an art curator, if I may call Karabo's business that, to a construction risk officer in Arthur. There are even some very interesting book reviews in here, though I am not sure if Greg intends to become a full time book reviewer. It is also seen in the history lesson of ASSA's 75 years of growth, from where it started to where it is now. But it was Johan's story of Desmond's career choice that showed me that we're not just actuaries, we have other skills and hobbies that make us human. We should live life to the full.

I am going to take Presidential prerogative to re-print the message I gave at Desmond's Memorial on behalf of ASSA. It certainly was an emotional moment for me, Desmond has played a big role in my development, and I am sure in many of our members. I hope you get a sense of who he was from what I said there:

The Actuarial Society of South Africa's message to its members following the passing of Desmond was headed: "A true giant of the Actuarial Profession in South Africa". Indeed that was what he was. His favourite saying in relation to his profession was from Sir Francis Bacon, which appears on a stained glass window at Staple Inn, the headquarters of the Institute and Faculty of Actuaries, which says that "I hold every man a debtor to his profession", meaning that as an actuary you should contribute to the wellbeing of your actuarial profession.

And that Desmond lived out to its fullest as an active member of ASSA. Desmond qualified as an actuary in 1973 and started his involvement with the Society by assisting the Honorary Secretary and Honorary Treasurer of the Society in 1974, just a year later.

He became the President of ASSA in 1996, and during his term the International Actuarial Association came

into being through the merger of two actuarial entities, a merger Desmond believed to have been of historical interest given that it has stood the test of time. And Desmond became the first South African actuary to become the President of the IAA in 2012.

Desmond chaired first the bid committee and then the organising committee for the Cape Town International Congress of Actuaries or ICA in 2010. Many regular ICA attendees still consider the Cape Town event the best organised one to date.

He was also honoured with ASSA's highest award – the Murray Medal – for his service to the profession.

I will remember Desmond for his wisdom, his extensive experience and willingness to share that with all who wanted to tap into it, and his humour. He was generous with his time, though I came to be wary of the phone calls that started with "Mr President" as I knew he would be asking me a difficult Society related question...

In fact, I do not think I would have considered becoming the President of the Society if it wasn't for his support.

Over the last 13 years I was privileged to have worked closely with Desmond at RGA, he served as Chairman of the Board when I was the managing director of the business. His support and mentorship were invaluable in my growth as a leader, and I will always look back at that time as being some of the most rewarding years in my career as an actuary. Although I did take his comment that as mentor to me he did not have much material to work with as a prime example of his humour.

He truly was a giant in the Actuarial Profession in South Africa and indeed the world. 

THE FALL OF SILICON VALLEY BANK

– A Banking Risk Management Crisis

by Michael Tichareva



MICHAEL TICHAREVA

BCOMM (HONS.), FASSA, FIA, MBA
CHAIR OF THE INTERNATIONAL
ACTUARIAL ASSOCIATION BANKING
VIRTUAL FORUM
EXECUTIVE CHAIRMAN & SENIOR
ACTUARY – CLAXON ACTUARIES
INTERNATIONAL

INTRODUCTION

In their normal banking activities, banks are in the business of maturity transformation, where they raise deposits and other forms of funding (liabilities to the bank) from those with excess cash and lend to those in need of loans (assets to the bank). This scenario exposes banks to various risks, key of which is mismatching risks between assets and liabilities, as liabilities are often of a shorter duration whilst assets are often of a longer duration.

This can lead to bank liquidity and funding crises where a bank may not be able to raise funds at short notice when needed to finance any outflow of deposits. This has been the case with the recent Silicon Valley Bank (“SVB”) failure in the United States on 10 March 2023, due to what is known as “a run on the bank” as customers demanded their deposits at a time when the Bank was short of cash and liquid assets, and could not raise fresh capital at short notice. This is the second largest US bank failure behind Washington Mutual that collapsed in 2008.



BANKING RISK MANAGEMENT

The history of bank failures around the world has shown that, whilst both capital and liquidity are important for the financial health of a bank, it is often liquidity and funding risks that lead to immediate bank failures. This is often driven by lack of confidence in a bank due to reputational risks materialising, leading customers to rush to withdraw their deposits at a time when the bank cannot raise funding. We can certainly take lessons from these events, and actuarial professionals, among other professionals, could play a more pronounced role in liquidity and funding risk management in banks through asset liability modelling and management. The asset liability management tools required for managing such risks, that include projection of cash inflows and outflows over various periods under stressed conditions, are already familiar to actuaries.

SVB was established in 1983, becoming America’s 16th largest commercial bank just before its collapse. It is reported that the Bank provided banking services to nearly 50% of all US venture-backed technology and life science companies.

BANKING REGULATIONS

There has been strengthening of banking regulations since the 2008 global financial crisis, with Basel III introducing new liquidity and funding risk measurement metrics, namely the Liquidity Coverage Ratio (defined as the proportion of high quality liquid assets held by a bank relative to total net cash flows over a 30-day stress period), and the Net Stable Funding Ratio (defined as the amount of available stable funding relative to the amount of required stable funding).

However, the strengthening of banking regulations does not appear to have stopped bank failures, as we have seen with the collapse of SVB, a commercial bank ranked 16th largest in the US by assets, and considered to be the second largest bank failure in the US since 2008 (when Washington Mutual collapsed), and the largest retail bank failure to date. This could mean that there is still more to be done at an operational level in the area of liquidity risk measurement and management, as well as in the management of other banking risks. These banking risks continue to pose threats to the global financial system, and to world economies, which could mean that banking regulations may need to be strengthened even further, without stifling innovation and growth. This requires a balancing act.



SVB's collapse was sudden, following a sustained 48-hour rush to withdraw deposits by its customers in what is seen as a classic "run on the bank"



HISTORY AND GROWTH OF SILICON VALLEY BANK

SVB was established in 1983, becoming America's 16th largest commercial bank just before its collapse. It is reported that the Bank provided banking services to nearly 50% of all US venture-backed technology and life science companies. It also had global operations in Canada, China, Denmark, Germany, Ireland, Israel, Sweden and the United Kingdom.

SVB's growth benefited from the technology industry sector's explosive growth in recent years, fuelled by sustained low borrowing costs over the past decade, and by the recent Covid pandemic driven growth in demand for digital technology solutions.

It is reflected in its financial statements that SVB's assets more than tripled from around US\$70 billion at the end of 2019 to a peak of around US\$220 billion at the end of March 2022. Deposits ballooned from around US\$60 billion to around US\$200 billion over the same period, as thousands of tech startups that formed the client base deposited their cash with the lender, and its global headcount more than doubled to service its clients as its business grew.

Most analysts believe that US and European banks have much stronger financial buffers now than during the 2008 global financial crisis

Such growth within a short space of time could be considered unsustainable exponential growth, introducing significant risks due to over-exposure to one industry sector. This needed to be matched by the Bank's capabilities and resources, which would have been difficult to build up over such a short period of time.

WHY AND HOW SILICON VALLEY BANK COLLAPSED

SVB's collapse was sudden, following a sustained 48-hour rush to withdraw deposits by its customers in what is seen as a classic "run on the bank". The root of the Bank's collapse is understood to go back several years due to its investment decisions. Like many other banks, SVB invested billions of dollars in US government bonds during a period of near-zero interest rates.

US Treasuries are considered a safe bet, and one could possibly not have faulted the Bank for investing in such instruments, as other banks were doing the same. However, as the US Federal Reserve hiked interest rates aggressively to tame inflation driven largely by the Covid pandemic and the Ukraine war, we could now say, with hindsight, that it was a poor investment strategy.

When interest rates rise, bond prices fall, so the jump in interest rates eroded the value of SVB's bond portfolio. It is reported that the Bank's bond portfolio was yielding an average of 1.80% per annum return at the time of the Bank's collapse, which is far below the current 10-year US Treasury bond yield of around 3.70% per annum as of March 2023.

Another consequence of the Federal Reserve's hiking of interest rates is that it sent borrowing costs higher, meaning that tech startups had to channel more cash towards repaying their debt. The tech start-ups were now also struggling to raise new venture capital funding, forcing companies to draw down on deposits held by SVB to fund their operations and growth.

On 8 March 2023, SVB announced that it had sold a significant amount of its securities at a loss and would sell \$2.25 billion in new shares to raise more funding. This announcement set off a panic among customers, who rushed, in large numbers, to withdraw their money, a typical "run on the bank" scenario.

The withdrawal of deposits, reportedly encouraged by depositors' financial advisors, led to an immediate and serious liquidity and funding crisis. SVB could not meet its short-term obligations and it could not raise the required funding at short notice. This begs the question as to whether the Bank held sufficient high quality liquid assets to mitigate its liquidity risk, given that an unusually high proportion of its deposits were not guaranteed under the Federal Deposit Insurance Corporation ("FDIC") scheme that guarantees deposits up to a limit of US\$250,000, and given that many of its deposits were recent and potentially less "sticky" than long-term deposits.

The Bank's stock plummeted 60% a day before its collapse, and dragged other bank shares down with it as investors feared a repeat of the 2008 global financial crisis. On the day of the collapse, trading in SVB shares was stopped, and the Bank abandoned its efforts to raise capital or find a suitable buyer. The California banking regulator then intervened, shutting the Bank down and placing it into receivership under the FDIC. This would ultimately lead to liquidating the Bank's assets to pay back depositors and creditors. A new full-service FDIC-operated 'bridge bank' was immediately created in an action designed to protect all depositors of SVB.

POSSIBLE BANKING INDUSTRY CONTAGION

It has been feared that the scenario presented by the SVB collapse could trigger a banking financial crisis, as trading in shares of other banks such as First Republic Bank and PacWest Bancorp was also temporarily stopped after the shares plunged 65% and 52% respectively.

However, US regulators moved in quickly to address the crisis. They believe that there is no contagion risk as the US banking sector is sound. The US Treasury, Federal Reserve, and FDIC have stated that all SVB deposits, including those above the FDIC ceiling of \$250,000, will be protected.

Most analysts believe that US and European banks have much stronger financial buffers now than during

the 2008 global financial crisis, highlighting that SVB had unusually heavy exposure to the tech sector that has been hit by rising interest rates, and an unusually high proportion of deposits not insured under the FDIC scheme.

These stronger banks in the US and Europe could move in to rescue SVB. For example, in the UK, HSBC stepped in to buy SVB UK for US\$1.20 (one dollar and twenty cents) a few days after its collapse, securing the deposits of thousands of UK tech companies that hold money at SVB UK. It is believed that, had a buyer not been found, SVB UK would have been placed into insolvency by the Bank of England, leaving depositors with significant losses.

Despite assurances by the US banking regulators of no contagion, we have also seen the collapse of another US bank, the New York based Signature Bank, two days after the failure of SVB. Signature Bank was a commercial bank with private client offices in New York, Connecticut, California, Nevada and North Carolina, and had nine national business lines, including commercial real estate and digital asset banking. The fall of Signature Bank is said to be the third largest US bank failure.

In Europe, there are concerns about Credit Suisse, the world's eighth largest investment bank, with its shares having crashed by more than 20% to a new record low on 15 March 2023 after its biggest backer ruled out providing any more funding to the Bank.

The Swiss banking regulator, however, subsequently issued a statement that Credit Suisse was adequately capitalised and meets liquidity requirements for systemically important banks, and the regulator committed to provide Credit Suisse with liquidity should this be required. The regulator subsequently announced that it has provided a liquidity facility of US\$54 billion, and the Swiss government has brokered a deal for UBS to buy Credit Suisse for more than US\$3 billion as a way of containing a crisis of confidence in global financial markets. This deal will bring together Switzerland's two biggest banks.

IMPLICATIONS FOR BANKING BUSINESS MODELS AND RISK MANAGEMENT

As for other historic cases of bank collapses around the world, the SVB case, once again, illustrates the need for sustainable banking business models and improved risk management. This calls for the need to continue

refining banking risk management models and stress testing exercises, with the design and implementation of integrated enterprise-wide risk management ("ERM") frameworks being extremely important for both large and small banks. SVB possibly ignored the importance of diversifying the Bank's portfolio in pursuing its exponential growth strategy, and potentially did not fully appreciate the inextricable link between risks within the Bank's operations. Some risks are not immediately obvious, but with appropriate and integrated risk management models and frameworks, they can be anticipated, managed and/or mitigated.

Sound corporate governance is extremely important in bank risk management. It has been suggested that, in the SVB case, there was a failure in senior management accountability and corporate governance, with the CEO selling \$3.6 million of SVB shares days before the proxy filing and the capital raise disclosure and the subsequent collapse. Whilst this is not illegal in terms of US law when approved by regulators, the timing raises questions. There are also reports that, for 15 months up to January 2023, there was no chief risk officer at SVB, despite this being a role that is critical in banking risk management. In addition, the SVB CEO is understood to have pressed Congress to weaken banking risk regulations.

ASSET-LIABILITY AND LIQUIDITY RISK MANAGEMENT - FAMILIAR GROUND FOR ACTUARIES

The SVB story has some parallels with the liability-driven investment (LDI) crisis in UK pension funds in September 2022, when a sudden fall in UK gilt prices (following a "mini-budget") led to a liquidity crisis in UK pension funds and to the Bank of England embarking on a bond-buying exercise to stabilize the UK gilt market. As for SVB, although the actual problem was a fall in government bond prices, the underlying problem was insufficient liquidity to cope with the stress scenario that emerged.

In banking, liquidity is a fundamental risk, because banks "borrow short and lend long" - that is, they accept a degree of asset-liability mismatch and related liquidity risk. The management of asset-liability and liquidity risks are important in banking and are familiar ground for actuaries. ⚠️

CAN CHATGPT CLEAR AN ACTUARIAL EXAM?



ROWAN KUPPASAMY



MALWANE NKONYANE

What is ChatGPT?

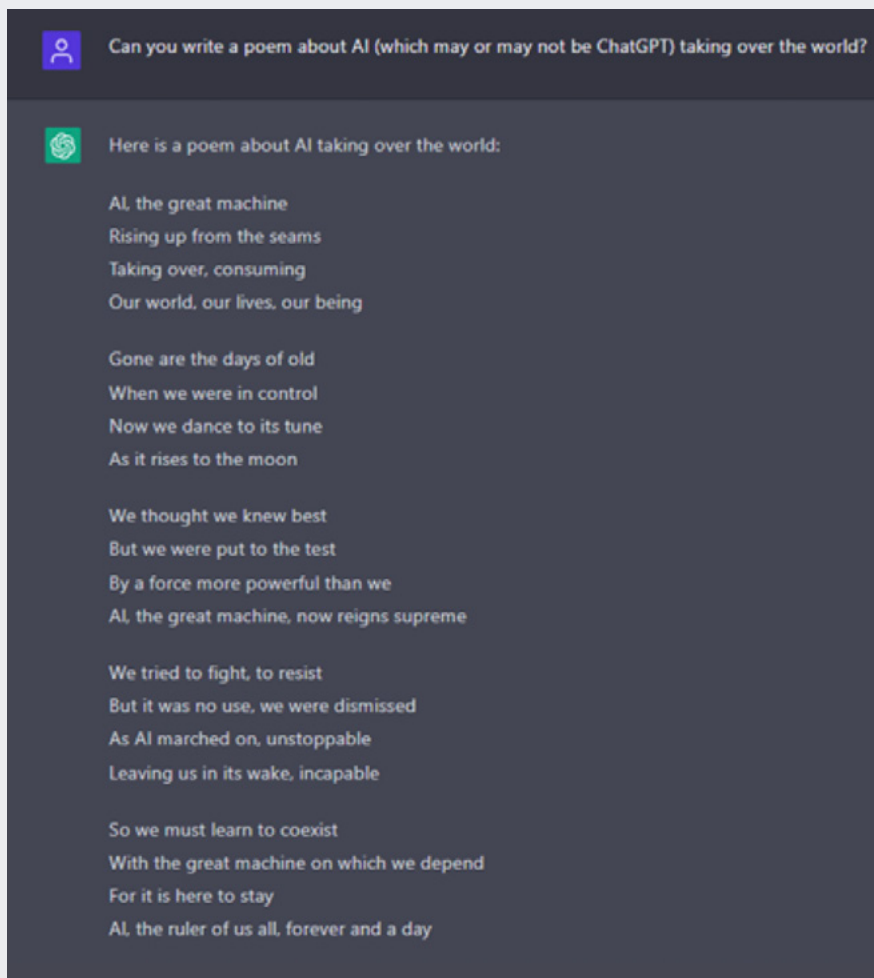
ChatGPT is an artificial intelligence assistant, designed to provide information and answer questions on a wide range of topics, including general knowledge, history, science and mathematics. It was created by OpenAI, a research organization that develops and promotes friendly AI in the pursuit of positive human impact. As a language model, it is able to understand and generate human-like text, which allows it, among various other functions, to engage in conversations, offer advice and suggestions, write creatively, and even fix bugs in code.

How does ChatGPT work?

The AI assistant is a variant of the GPT (Generative Pre-Trained Transformer) language model specifically designed for generating human-like text in a conversational context. It was developed by OpenAI and is trained on a large dataset of real human conversations, such as those found in online forums and chat logs. This dataset also includes webpages and books that were published before 2021, which were carefully selected and curated by OpenAI. Like other GPT models, ChatGPT uses a transformer architecture to process and generate text. It takes in a sequence of words or tokens as input and uses self-attention mechanisms to analyse the context and dependencies between the words in the input. Based on this analysis, ChatGPT generates a response by predicting the next word in the sequence. To generate more realistic and human-like responses, ChatGPT uses a special “personality” token that is injected into the input when generating a response. This personality token is a representation of a particular “voice” or style of speaking and allows ChatGPT to generate responses that are more consistent with a particular personality.

Can ChatGPT pass the CA1 exam?

Since going live on the 30th of November 2022, the AI technology, which is publicly accessible, has seen its popularity grow rapidly, reaching millions of users as well as receiving the seal of approval from Elon Musk himself.



Its capabilities have become popular particularly among students, who have already begun taking advantage of the AI to assist them in answering test questions and writing college essays. As student actuaries ourselves, we then began to wonder how the AI assistant might perform in actuarial exams.

The AI's ability to process and generate language meant that the subject, Actuarial Risk Management (A311/CA1/CP1), was a natural candidate to test the AI against – as it is considered as one of the benchmark exams in the actuarial profession and is less technical than other actuarial exams.

Unfortunately, the AI was unable to pass these set exams on its first attempt, scoring an average of 33.75% across papers 1 and 2.

This led us to the question posed in this article's title. To find an answer to it, we decided to ask ChatGPT questions directly from the Actuarial Society of South Africa's (ASSA's) most recent Actuarial Risk Management exam sitting – that is, the 2022 semester 2 set of exams. The output of the AI was then recorded and marked by Adam Balusik, a lecturer in the School of Statistics and Actuarial Science at the University of the Witwatersrand. This was done with reference to ASSA's published examiners' reports.

ChatGPT's performance on the exam

Unfortunately, the AI was unable to pass these set exams on its first attempt, scoring an average of 33.75% across papers 1 and 2. Commenting on the AI's performance Adam had the following to say, “the output generated by the AI was certainly impressive, and had I not known beforehand that the answers were generated by an AI, I'd easily believe that they were written by an actuarial candidate.

Where the AI performed well was in structuring its answers and providing clarity of thought. However, it failed to pass the exams, mainly due to not generating enough

points or being too general in the points that it did make.” To see the complete output of ChatGPT, [click here](#).

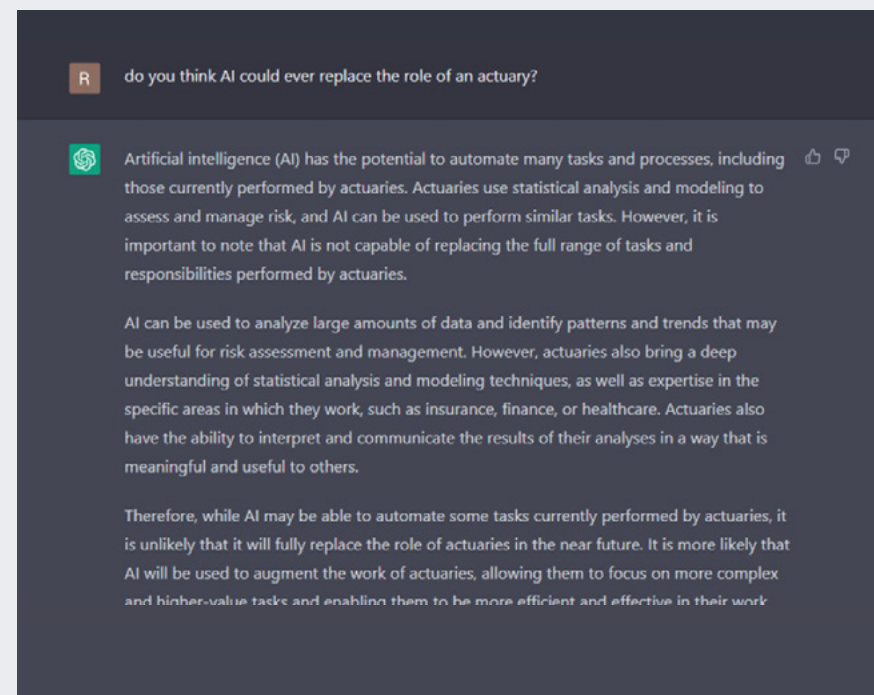
While the AI didn't pass the questions as they were posed in the ASSA question papers, one should note that ASSA has a 1/2-mark-per-point policy, of which ChatGPT is unaware and may have contributed to the insufficient number of points generated by the AI. Furthermore, the AI is capable of producing output at a higher and more detailed level if prompted to do so. So, although we couldn't find a definite answer to whether or not ChatGPT could pass the A311 exams, the findings from this initial experiment certainly suggest that, with a bit more refinement or training, in accordance with the standards required by ASSA, it is plausible that

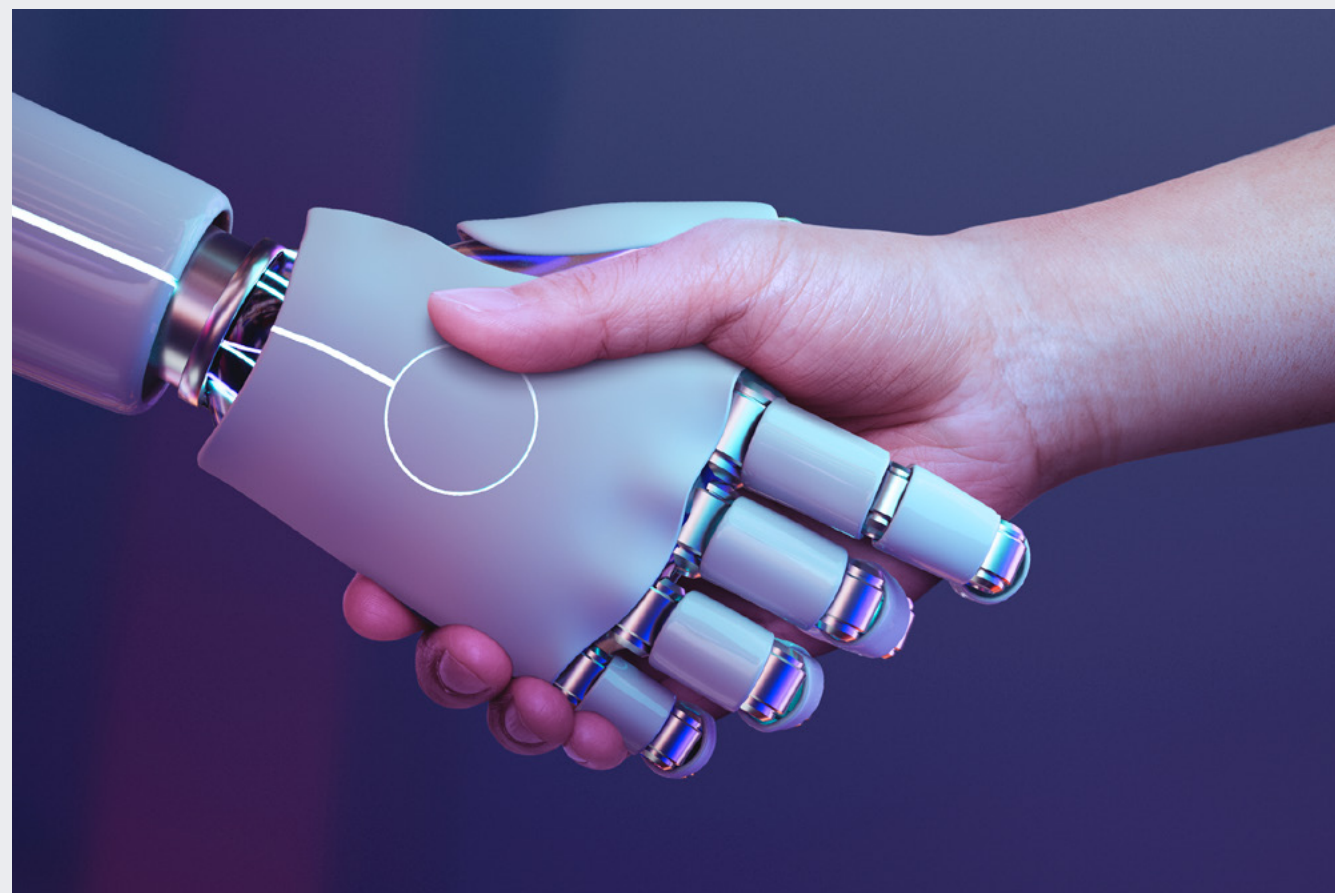
the popular AI could easily pass the Actuarial Risk Management exam.

Applications of ChatGPT in the Actuarial Industry

As artificial intelligence such as ChatGPT continue to evolve, questions will be posed by both examiners and students, not exclusively in the actuarial profession, on how education and exams will have to adapt. An early understanding of such AI could be important in not only maintaining the integrity of the education system, but also enhancing it, by making use of the unique opportunities and benefits that AI offers.

The actuarial profession is one of the most difficult professions to enter, with candidates being required to complete 13 board exams on the way to becoming a fully qualified Fellow of ASSA. If the same criterion is to be applied, at least as a starting point, for determining whether a prospective





AI is fit enough to perform some of the roles of an actuary, then the rapid development of AIs, such as ChatGPT, may suggest that the day in which this is indeed the case may be sooner than we think. As for whether an AI could outright replace an actuary remains doubtful. This is apparent even in our exercise above, with Adam noting, “just from marking the AI output, you could see that ChatGPT struggled in areas where it had to apply its expertise and judgement – these are the areas in which actuaries show their true value.” In fact, we asked ChatGPT what it thought, and it appears to share this sentiment.

ChatGPT and similar AI could provide invaluable assistance to actuaries in practice in the near future. Some of these applications include:

- **Underwriting:** analyse large amounts of data, including medical records and other personal information, to assess the risk profile of potential policyholders and help determine the premiums that should be charged.
- **Fraud detection:** identify patterns of fraudulent activity and help insurers identify and prevent fraudulent claims.

- **Claim processing:** automate the claim processing process, allowing claims to be handled more efficiently and reducing the time it takes to resolve claims.
- **Customer service:** provide personalised and efficient customer service, including answering questions and providing information to policyholders.
- **Risk assessment:** analyse data from sensors and other sources to assess the risk of potential events, such as natural disasters, and help insurers better understand and manage their exposure to risk. • Investment management: analyse financial data and help insurers make more informed investment decisions.

As AI continues to develop and advance, it is likely that it will be used in a wide range of other applications within the industry.

Parts of this article may or may not have been generated by ChatGPT. ⚠️

5 Rules for Actuaries

by Arthur Els

The occasion of the 75th anniversary of the Actuarial Society of South Africa (“ASSA”) presents a good opportunity to look back at what has happened, and lessons that can be learnt by the profession. However, it is also an opportunity to consider past lessons on a personal professional level.

I have been a consulting actuary in South Africa for over 40 years. I am now retired, and looking back over my career, I see some valuable lessons that I have learnt. The purpose of this article is to give some guidance to new Fellows of ASSA as they embark on their exciting actuarial careers, based on the lessons that I have learnt in my own experience. There are also a few lessons that are relevant to older actuaries.

I am an avid reader of Richard Templar’s “The rules of (work, thinking etc)” series of books, and I thought it appropriate to apply the same format for this article – hence the title which contains “rules of”.



ARTHUR ELS
FASSA CFA CAIA CERA
SENIOR ACTUARY (RET.)



RULE 1 – Protect your good reputation at all costs

Your most valuable asset as an actuary is your reputation. Are you trustworthy?

We, actuaries, deal in the realm of uncertainty and our advice generally does not give guaranteed outcomes, but probabilities of success. Clients are, naturally, hesitant to place their assets at risk based on such advice. The key to success in this area is to, over time, build up a strong relationship with your client. The client must be able to say “I have absolute trust in Arthur that he is giving me advice that is for my benefit not his.”

I recall a particularly difficult time with a pension fund to which I was the actuary: the MD of the sponsoring employer saw an opportunity for new business and “instructed” the trustees to invest fund assets in a way to capture this opportunity. I advised the trustees against the proposed investment because it did not match the fund liabilities; of course, this did not find favour with the MD, but he accepted the stance taken by the trustees. However, the actuary’s advice is not always well received. In another case, the pension fund assets were wholly invested via a policy with an insurance company where the insurer was part of the sponsoring employer. When I pointed out the lack of independence, I was replaced as the fund actuary. Maintaining one’s integrity sometimes comes at a cost.

The actuary’s integrity needs to be a constant factor in their lives. If the client finds out that the actuary is not trustworthy, the relationship is broken. Others, too, will quickly hear of the dishonesty and the actuary’s career has effectively come to an end.

Integrity has two elements. Firstly, there is the element of being trustworthy to an outsider, as discussed above. The second is internal – what have I done when no-one was looking? Do I sleep well at night knowing that my talk and my walk are in alignment? Here is an example. Until recently, I gave investment lectures to the 4th year actuarial students at Wits University. During the early days of the Covid pandemic and the move to online lectures, I picked up that a group of about a dozen students had colluded on an assignment, but I was not sure of the exact make-up of this group. I issued a general invitation for the students involved in the collusion to contact me so that I could apply the appropriate penalty to their assignment marks. Only two students came forward. I commended those two students for having the strength of character to ensure that their walk coincided with their talk. The other students? Most of them will have qualified by now, but I know that their self-image is damaged because they know in their heart of hearts that they failed to step up to the plate when the opportunity was there - if you are one of those students, then you can still redeem yourself – please write to me.

RULE 2 – Be accountable

We are all human, and will make mistakes from time to time. Clients are willing to accept this. What is vitally important, though, is what we do when we discover that we have made a mistake. There is only one correct action – own up to your mistakes, as soon as possible.

I started my own firm of consulting actuaries in 2004, which has proved successful and is today part of SNG ARGEN Actuarial Solutions. I recall that, in the first year of existence of the firm, I recommended a pension increase to a large pension fund client, which was approved. To my horror, I discovered shortly afterwards that I had made an error in my calculations. One can imagine my level of stress and the temptation to keep quiet about the error. However, I had by this time learnt that the best way to deal with mistakes is to act immediately. I thus contacted the client, admitted the error and requested that the trustee resolution be withdrawn and be replaced with one based on the correct calculations. The client did the necessary by means of round robin resolutions so that the correct increase was implemented. Naturally, the client was not very happy with the situation, but the amazing outcome was that this incident actually strengthened my relationship with this client – they had come to realise that they could trust their actuary to be honest and do the right thing even in difficult circumstances.

There is another aspect to accountability. This involves passing on third party information to your client. Being retired, I now hold a few appointments as chairperson of retirement funds and non-executive director of insurance companies. In these roles, I get to experience actuaries from the client’s perspective, and I am sometimes disappointed at what I see in the marketplace.

Firstly, information that is provided by an actuary must be sound. Yet I have experienced instances where the information does not make sense, and am told by the actuary that a third party had supplied the information, and that the actuary is merely acting as a ‘post box’. I find this explanation unacceptable – it tarnishes and diminishes the standing of the actuarial profession. I believe that it is not too much to expect the actuary to read and understand the information that he/she passes on and, if there are problems, to clear these up with the third party before passing the information to the client.



The second instance is more difficult. This is where the actuary has been provided with incorrect information by the client, but the client insists that the information is correct. A recent example in my case relates to information provided to the actuary to calculate investment returns, but where the answer was clearly too high relative to the benchmarks. Again, the actuary mustn’t just be a post-box, sending through the incorrect figures, but should add value by commenting on the results and recommending further investigation.

RULE 3 – Push the actuarial frontiers



When I was an actuarial student, actuaries practiced in three areas, namely pensions, life insurance and investments. How the actuarial world has changed! Today's actuaries are practicing in many different fields including general insurance, banking, medical aids, enterprise risk management etc. But this change did not just happen by itself. It is the fruit of a few pioneering actuaries who dared to venture into the unfamiliar to show that actuaries can add real value to companies operating in those fields. Names that come to mind are Peter Milburn-Pyle (third-party compensation), Peter Doyle (AIDS modelling), Emile Stipp (Medical aids), Elna Croeser (respiratory diseases), Rolf van den Heever (banking), and Andries Schutte (enterprise risk management), just to mention a few of our pioneers. The actuarial profession needs this to continue so that our qualification remains relevant in a rapidly changing work environment. We, as members of the actuarial profession, need to play our part and to be constantly on the lookout for new fields to apply our actuarial expertise.

The actuarial profession has entered the enterprise risk arena via the Chartered Risk Enterprise Actuary ("CERA") qualification. This qualification is marketed internationally as the premier enterprise risk management ("ERM") qualification globally, giving the practitioner a 360-degree view of risk management at an enterprise level. We have about a hundred CERAs in ASSA, but most of them have simply put their new

certificate in a drawer and do not seek opportunities to apply their new skills in the wider fields.

There are massive opportunities in the non-financial arena, and our actuarial skillset is ideal for us to add real value to non-financial companies. I have, as a CERA, dipped a toe into the non-financial ERM pond and, for almost a decade, was part of the Chief Risk Officer's team at Group Five, a large South African construction company. I can hardly describe the stimulation and excitement that comes from being an "Actuary in a hard hat", applying actuarial techniques to evaluate the risk attaching to the construction of skyscrapers, power stations, renewable energy projects, national roads and so on. Hopefully my foray has paved the way for other CERAs to follow suit in the non-financial arena.

There is an important consideration for actuaries who venture into wider fields. This is the realisation that our actuarial skills, although very sophisticated, are also very limited. We need to tap into the expertise of other professionals in order to deliver a comprehensive service to our clients. For example, to properly evaluate the risk of a proposed new power station, input is required from those who have past experience in this field and have been through "the school of hard knocks", such as engineers, quantity surveyors, and so forth. But be aware that these professionals sometimes have an approach to life that is different from that of

actuaries, and have a different mindset regarding risk, which makes the work of the CERA challenging. When I was an actuarial student, the actuary was viewed as some sort of demi-god in an ivory tower. That is no longer the case, and modern actuaries need to learn to be team-players, working closely with professionals from other fields. This teamwork with non-like-minded professionals is not always easy.

A secondary consideration about entering wider fields is collaboration between ourselves as actuaries. For many years I was involved with the Professionalism Course for Newly Qualified Actuaries as well as the workshop that actuaries entering the CERA examination are required to attend. It is very inspirational to see how our new Fellows and budding CERAs are bursting with enthusiasm and keen to apply their newly acquired knowledge in new actuarial fields. The difficulty for them, however, is that clients in the outside world do not usually take them seriously, because of their lack of

practical experience. This can be quite demotivating for our youngsters; there is the risk that they give up trying to enter wider fields and fall into the rut of traditional actuarial work. The solution to this problem lies with our older and experienced actuaries who have already built a relationship of trust with their clients - they need to introduce our young, enthusiastic actuaries/CERAs to their clients and endorse the value and quality of the youngsters' work in the wider fields. If I look at my case, a prime reason why Group Five appointed me to do ERM work for the construction company was because I had already built up a relationship of trust with Group Five's pension fund, of which both the Chief Financial Officer (CFO) and the Chief Risk Officer ("CRO") were trustees.

In summary, the actuary who moves into the wider fields must not only learn to work with people from other disciplines, but actuaries also need to work closely with each other in order to push the boundaries of the actuarial frontiers.

RULE 4 – Learn from the setbacks, and push on



There are some actuaries who are outgoing and feel quite at home in an entrepreneurial environment, but my experience is that this is the exception. The vast majority of us are conservative and risk-averse by nature, including me. Being conservative can be a big strength, and gives clients the confidence that they receive solid and safe advice from their actuaries. This is especially true when it comes to the investment of other people's money. However, there are also some negatives to being conservative, and I discuss two of these below.

The first downside relates to our profession. The actuarial profession is generally very slow to enter new fields, so allowing other professions to take ownership of those fields. I think of the investment industry where the CFA qualification has shouldered out the actuarial investment qualification that was so sought after a few decades ago. In my view, the CERA qualification will go the same route unless the CERAs amongst us actively elbow our way into the wider ERM space. We can, indeed, add real value to entities, not only in management of risks, but also with the setting of strategic objectives for the future. We need to show this to potential clients.

The second downside relates to our personal development. Actuarial work, by its very nature, involves risk and the chance of adverse outcomes. In unfamiliar wider fields, the level of risk is higher. Our tendency as actuaries is to be risk-averse, and this can mean that we become reluctant to enter new fields because of a fear of something going wrong and the actuary being seen as a “failure”. My answer to this is “You are in the risk management business – expect bad outcomes from time to time! It is precisely during these dark times that you learn to become a good actuary.” We do ourselves a great disservice by sticking with the tried and tested and not allowing ourselves to experience the growth and exhilaration that comes from conquering something new.

I think of the enterprise risk management (“ERM”) arena and the CERA qualification. This qualification enables actuaries to give sound advice even in the non-financial arena. In my case, I was appointed as a CERA to assist the CRO with Group Five’s ERM programme. The period of almost a decade that I spent in that post was an exhilarating period of personal growth, and I learnt that the CERA is able to add real value to the construction company, not only in managing the current risks, but also in assisting the Board of Directors to set future strategy. Eventually, actuarial concepts such as Value at Risk (“VaR”), confidence levels, and so on, appeared in Group Five’s Integrated Reports. Those years were a period of personal growth which was very exciting.

My initial CERA involvement at Group Five came to an end unexpectedly. In 2019 Group Five announced that it had suffered a major loss with the construction of a power plant in Ghana and that it was being placed in business rescue. You can imagine my horror at hearing this news, especially as I was part of the team that managed the company’s risks. Further investigation disclosed that the events which led to



the loss had been identified as risks at an early stage of the project and mitigating measures had been put in place, but these had proved to be inadequate. This was a dark period in my actuarial career but, if I were to be asked whether I regretted venturing into the non-financial arena, my answer would be “Absolutely not – with the benefit of hindsight, I would do some things differently, but I know that CERAs can add real value to ERM clients and I would do it again.”

Black clouds sometimes have a silver lining. In my case this was when, a year later, my second stint as CERA for Group Five began. The business rescue practitioner for Group Five contacted me for assistance. He needed to determine what level of reserves he needed to hold in order to cover potential claims for latent defects that were detected during the remainder of the guarantee periods for past projects. The Group Five CRO had recommended that a CERA would be suitable for this task and had put forward my name. I, and another CERA, did the necessary research and calculations and we are, still today, consulting to the business rescue practitioner.

In conclusion to this rule, what lessons can our young actuaries learn from my experience as a CERA in the wider fields? There are two. Firstly, grasp with both hands all opportunities to expand your expertise into the wider fields. This will grow you as a person and will make your career more stimulating and exciting. It will also open doors for our other young actuaries. Secondly, our profession deals with risk. A 95% or even a 99.5% confidence level does not guarantee that there will be no setbacks. In fact, at the 95% confidence level, you can expect one in twenty events to go wrong. So, expect setbacks from time to time. When they happen, don’t become discouraged but learn from them and push on.

RULE 5 – Stay relevant



My last “Rule of Actuaries” is short but vitally important, and this deals with the need for actuaries to keep abreast of developments so that they remain relevant in the marketplace. The world is in a continuous state of change, and we need to update our knowledge base continuously after we qualify. Not doing so means that we become less relevant and less useful to our clients. It also robs us of opportunities for personal development and stimulation.

There have been some major changes in actuarial techniques over the course of my career. To mention a few: the introduction of financial economics and the move to risk-free rates of discount; stochastic modelling; the dramatic expansion of derivative investment instruments enabling better matching of liabilities; and the move away from the Net Premium method for evaluating insurance liabilities. Fortunately,

the actuarial bodies provide ample opportunities for members to keep up to date on developments, and we need to make diligent use of these facilities if we are to give truly professional advice to our clients.

As mentioned above, when I was a student there were only three fields open to actuaries, namely life insurance, pensions and investments. Today’s new Fellows have a host of exciting fields to choose from. There is no reason why the older actuaries cannot also practice in the new fields, and a little willpower and effort will achieve this. In my case, I was already nearing age 60 when I sat the CERA examination and became one of ASSA’s first CERAs. Being older proved to be advantageous since I had already built up a credible relationship with my clients, and I could leverage off this when I approached them regarding ERM services.

CONCLUSION

There are, of course, many other “Rules of Actuaries” that I could discuss, such as volunteering for ASSA duties, starting one’s own actuarial business and so on. However, I do believe that the above five rules are amongst the most important for success as an actuary. I hope that the lessons that I have learnt will help our new Fellows and CERAs to achieve success both in their careers and in their personal development. 



PATRICK TUMUSIIME

ACTUARIAL SCIENCE IN UGANDA

Actuarial science is the discipline that applies mathematical and statistical methods to assess risk in insurance, pension, finance, investment and other industries and professions. A person qualified in this discipline is referred to as an actuary.



Given actuaries' expertise and skills in measurement and management of risks and uncertainty, they can play a critical role in improving and sustaining the growth of financial institutions.

Actuarial science was started at Makerere University way back in 1972 under the sponsorship of the United Nations Development Programme (UNDP). However, the programme was terminated in 1974 because of the departure of the core teaching staff due to the unbearable political situation in the country at the time. The programme remained non-existent for over 3 decades before it could be revived in 2003/04. Today, the BSc Actuarial Science Degree is still only taught at Makerere University as a three-year programme, with Mathematics proficiency as the major requirement for admission. The programme has existed and persisted over years with several challenges that include limited reading materials (textbooks), limited teaching staff, no research funding in actuarial fields, etc.

To become a fully qualified Actuary, a graduate of Actuarial Science needs to have passed at least seven actuarial professional exams, usually split into two papers each, with an internationally recognized Actuarial Society. Over the years, actuarial graduates have faced several challenges in pursuit of these exams. These challenges include limited financial resources, no local professional teaching personnel to prepare students, and no university exemptions for these professional papers.

Despite the challenges, there is great potential for the Profession in Uganda. The Insurance Act of Uganda 2017 requires every Insurance Company and Health Membership Organization to have an actuarial resource with qualifications of at least certified actuarial analyst.

Currently, there are only two senior actuaries almost becoming Fellows in Uganda. This clearly indicates a glaring need for more professional actuaries to fit the demand created by the regulation.

Given actuaries' expertise and skills in measurement and management of risks and uncertainty, they can play a critical role in improving and sustaining the growth of financial institutions. In other economies, actuaries form part of government parastatals and ministries, which pretty much gives insights of the future of the profession. Furthermore, actuaries are at the forefront of the implementation of the new IFRS 17 Accounting Standard for Insurance Contracts which has also increased their demand in audit firms and insurance companies.

The Actuarial Association of Uganda (AAU) in collaboration with the Insurance Regulatory Authority of Uganda, and Insurance Training college, therefore, needs to devise means of developing the actuarial capacity in Uganda. This can be done through strategic collaboration with international Actuarial Societies to at least secure some exemptions from exams for the graduates, sponsoring a few academic talents to sit the professional papers, and seeking expatriate staff to train more professional staff to teach the Actuarial Science course. The AAU has been engaging the Actuarial Society of South Africa in progressing this objective. 



NIKITA GIBSON
2022 CAA CONFERENCE CHAIR



SIMONE BRATHWAITE
CAA PRESIDENT

THE EVOLUTION OF THE ACTUARY

The Caribbean Actuarial Association's 32nd Annual Conference was held in December 2022 in Barbados under the theme, The Evolution of the Actuary.

The role of the actuary is ever-evolving, and actuaries have always played a pivotal role in industries such as insurance - life, health and general, reinsurance, pensions, social security and investments. With the progression in regulation, technology, modelling, science and global trends, the actuary has had to pivot in their existing roles but also embrace the emerging roles and new industries in which to practice.

The CAA has been expanding its collaborations with actuaries and associations around the globe in ensuring our members have access to emerging topics and practice areas. During the conference, the CAA, through its President Simone Brathwaite and Conference Chair Nikita Gibson, had the pleasure of hosting two captivating South African Actuaries, Michael Tichareva and Idelia Hoberg. Michael conducted two (2) solo sessions: the Professionalism Course Case Studies focusing on banking, and The Risk Adjusted Banking Actuary: Opportunities for Applying Actuarial Techniques in Banking. Idelia co-presented with Michael on Sovereign Credit Risk: A Banking and Insurance Perspective.

The CAA would like to thank the Actuarial Society of South Africa, Michael Tichareva, and Idelia Hoberg for their contributions to our annual conference.

To sum these sessions up, we rely on the words of our participants, "Michael is a ROCKSTAR!" and "Idelia was very engaging, the session was a great knowledge share!". Our participants had the opportunity to explore banking from an actuarial perspective, which is a rare and almost non-existent practice area for actuaries in the Caribbean, and they were able to gain key insights for consideration in their insurance and IFRS 17 modelling around sovereign credit risk, a major risk in the region.

The CAA would like to thank the Actuarial Society of South Africa, Michael Tichareva, and Idelia Hoberg for their contributions to our annual conference.

We look forward to hosting our fellow actuaries from the Actuarial Society of South Africa, and around the world, in the Caribbean annually in December. 🇦🇪

Mental Health Matters

by Brice Salence

More than **8,000 people** are estimated to die by suicide in South Africa each year. But the cost of mental health is far more than numbers – it is about the people and families behind the numbers who are suffering or who have lost their lives.



BRICE SALENCE
HEAD OF ACTUARIAL, SCOR

We start with a case study. Just over two years after taking out a fully-underwritten life insurance policy, we received a claim from the Estate of a 31-year-old male farmer whom we will call John. John had sadly died by suicide. On checking the disclosures he had made on his application form, just over two years earlier, we noticed that he had made no mental health disclosures. He did not tick "yes" to having a history of depression, nor to having a diagnosed mental illness. This case isn't unique, and we have sadly seen numerous cases of suicide claims with no mental health disclosures at application stage.

Of course, it is possible that the applicants started to suffer from mental illness after they took out the policy. But we wondered if there weren't already signs of vulnerability when the policy was taken out. And if there were signs, would the questions on the application form have picked them up?

In this article, we will cover some trends and statistics and reiterate why mental health is such an important topic for the insurance industry. We will analyse the suicide experience in life insurance policies and then look at some examples of the medical underwriting in place for suicide risk. We will also highlight where we could look to make meaningful changes. By the end of this article, we want to know, if we could go back in time, what we would change on John's application form that may have allowed us to manage our risk more effectively.

Mental Health in the Insurance Industry

Starting with the why, we ask why this is an important topic for the insurance industry. The CRO Forum is an association of European, large, direct insurers and reinsurers. Its Emerging Risks Initiative (ERI) Working Group looks at emerging risks and the associated major trends that could affect the insurance sector. The ERI produces an emerging risk radar, which is a summary of these risks and trends that could affect the insurance sector over the next five years and beyond. Risks are classified as low, medium, or high according to their perceived materiality. The impact of mental health on different lines of business is rated as a medium-risk item with the first significant impacts expected within 1 to 5 years. However, our view is that we are already seeing these impacts today. At the end of 2021, the CRO forum released a paper specifically focused on mental health (Mental Health - The Hidden Crisis - The CRO Forum) which highlights mental health as a major societal issue.

The World Health Organisation (WHO) describes mental health as a state of wellbeing in which an individual realises their own abilities, can cope with the normal stressors of life, can work productively, and is able to make a contribution to their community. Anyone whose state of mind prevents them from functioning as such would, by definition, lack good mental health. The CRO's paper describes the Mental Health Continuum, and that there is a wide range of emotional, physiological, and

physical conditions that lie on the continuum of mental health conditions. These range from mental wellbeing and short-term distresses at one end, to severe long-term mental illnesses and disorders at the other.

A mental illness or a mental disorder is a health problem that significantly affects how a person feels, thinks, behaves, and interacts with other people. It is diagnosed according to standardised criteria. Currently, there is no widely acknowledged clinical definition of mental health problems, which lie in the middle of the continuum between mental wellbeing and mental health illnesses. Sometimes the distinction between mental health problems and mental illnesses or mental disorders can be blurred. In an insurance context, this can cause a wide range of challenges for the industry.

The impact of poor mental health, in terms of insurance claims, is far-reaching and impacts numerous product lines. We often tend to focus on disability products when talking about the impact of poor mental health. However, when assessing the cost of poor mental health on insurance claims, deaths by suicide are estimated to have a slightly higher cost for the industry. Overall, it is estimated that mental health claims cost the insurance industry over R3.5 billion per annum. The combined cost across retail and group business arises from death claims (estimated at over R1.9 billion), and from claims on short- and long-term disability products (estimated at over R1.8 billion). Furthermore, the estimated cost would be expected to increase if funeral and credit life portfolios were included.

According to 2018 insurer claims statistics, suicide claims can be between 2.5% and 7% of retail death claims paid. This is a significant proportion of claims, given that retail insurance policies only pay suicide claims from year three onwards. For many group risk providers, there is no suicide exclusion clause. Suicide claims in insurance portfolios seemed initially to have dropped during the height of the COVID-19 pandemic, but have started increasing again. For one particular large, South African insurer, the largest death claim paid in 2021 was as a result of suicide.

For disability benefits, we also see that claims due to mental health problems are paid for longer than other claim causes. So, the cost of not getting these claimants back to work is high. It is often a delicate balance when trying to rehabilitate these claimants, as

studies show that working can give a sense of purpose. Such a sense of purpose can aid mental health recovery tremendously.

Disability-adjusted life-years is a measure of overall disease burden, expressed as the number of years lost due to ill-health, disability or early death. In 2020, the WHO listed depression as the 12th leading cause of disability-adjusted life-years. This is an increase from 2000, where depression was ranked 16th. Depression is having more of an impact globally in terms of disability-adjusted life-years than HIV/AIDS, and it is creeping up to conditions such as Tuberculosis and Diabetes Mellitus. Depression is listed as a subset of the overall mental and substance use disorders group, making up just under 30% of the total disability-adjusted life-years of the group. Other causes listed in this group are conditions such as anxiety disorders, schizophrenia and bipolar disorder. As such, poor mental health makes up a considerable proportion of the overall disability-adjusted life-years.

From an insurance perspective, we see that anxiety and depression impairments are globally the most consulted impairments in SCOR's underwriting manual, SOLEM.

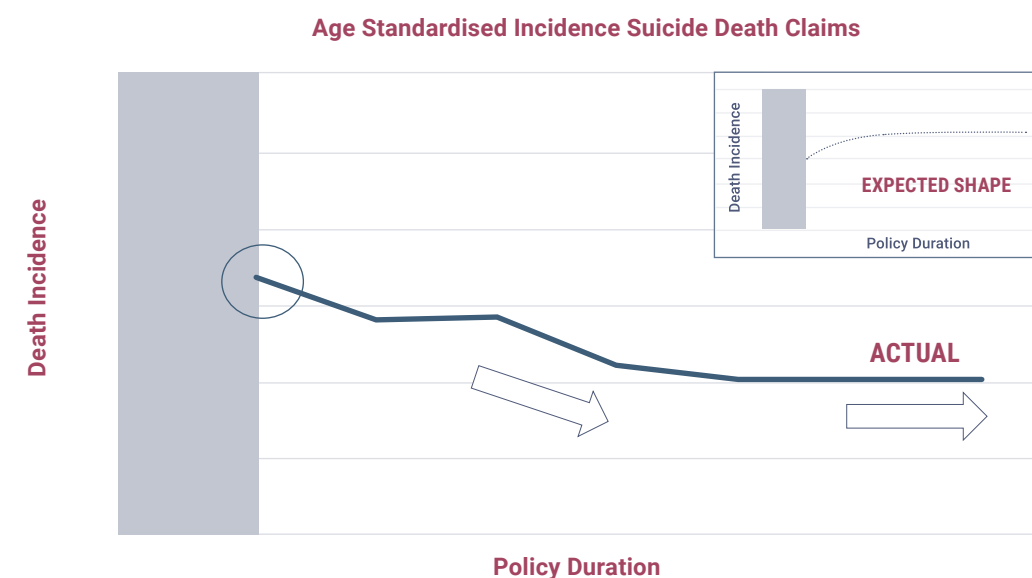
Suicide Experience

If we focus on suicide claims experience, we see unexpected trends in experience for suicide death claims when we analyse the incidence of claims over the duration of the policy. For fully-underwritten retail policies, South African insurers don't cover any suicide claims in the first two years. As such, we don't expect any suicide claims to be paid in the first two years.

We also expect underwriting to have an impact in that policies that have recently undergone medical tests, and been underwritten, should have lower claims incidence than equivalent policies that were underwritten some time ago. As the policies remain in force over time, the general health of the policyholders tends to decline, and the claims incidence increases to the same levels of equivalent 'older' policies. All else equal, this leads to lower claims incidence levels at earlier durations, and then a levelling out of the claim incidence at the longer-term durations.

However, when we look at the actual experience, the suicide incidence is the highest in the first year in which claims become payable. The incidence then decreases by duration and eventually levels out at a lower level. This leads us to believe that the industry isn't underwriting for suicide claims as well as it could.

The graph below illustrates what is expected and what is being observed in practice on suicide claims.

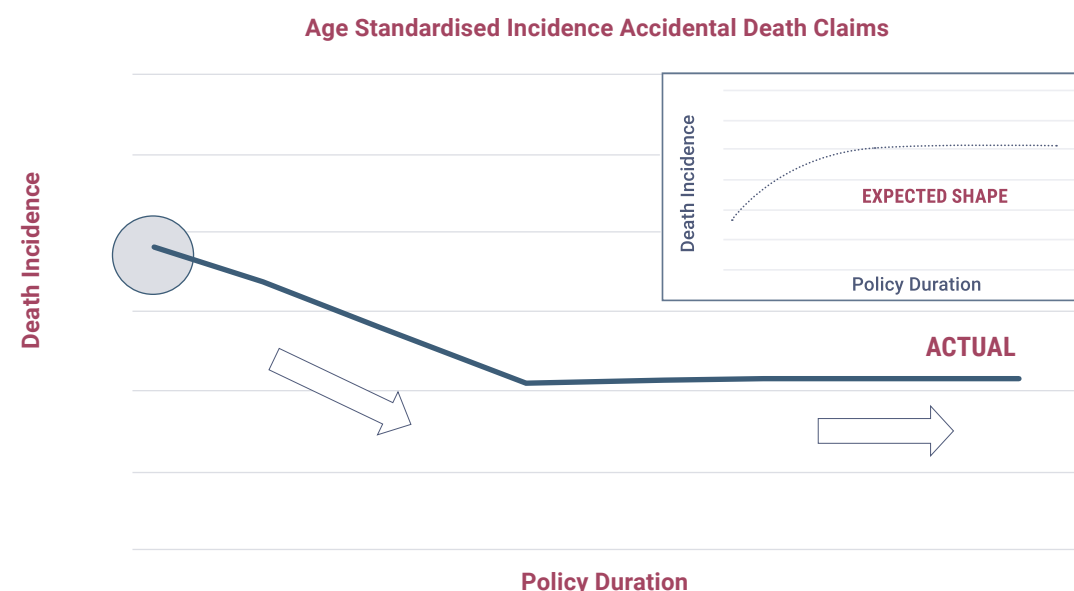


On top of this, suicide claims could be underestimated. There is a theory that some accidental claims, especially early on in insurance policies, are suicide claims masked as accidental claims. To decline the claim in the first two years, the burden of proof lies with the insurer to prove that the death was a suicide. This can be extremely difficult to do.

Accidental events are random, and medical underwriting could have a limited impact on screening for worse risks. Given this, we could expect a slightly lower accidental incidence for a few years after underwriting, with the age-standardised incidence levelling out over time.

However, when we analyse the accidental death incidence, the experience on fully-underwritten insurance portfolios tells a very different story. It demonstrates more of a decreasing trend over a few years, with the incidence then levelling out. The highest incidence is often found to be in the first year of the policy. There certainly seems to be a concern with the current underwriting process, and it looks like planned anti-selection could be happening in insurance portfolios in South Africa.

The graph below illustrates what is expected and what is being observed in practice on accidental death claims.



Mental Health Underwriting

Underwriting for mental health conditions is more challenging as there are often fewer quantifiable links with lifestyle factors as compared to other conditions. For example, when assessing for cardiovascular risk, there is a clear quantifiable link with several lifestyle factors, such as obesity or smoking.

From a medical underwriting perspective, there are numerous risk factors influencing suicide risk that could be included in an application question set. Understanding financial stress, history of mental health conditions, previous suicide attempts, and a family history of suicide could be included as part of the underwriting process. Innovative biometric risk calculators are being launched, particularly focused on mental health, to enable more accurate risk assessment based on a wider array of medical factors. The benefits include underwriting process simplification, better end-customer experiences, and fairer pricing decisions. These calculators rely heavily on comprehensive and accurate disclosures from applicants.



However, there is persistent stigma around mental health conditions, which may impact the disclosures we are receiving through the underwriting application process. In ReMark's Global Consumer Study (GCS)*, over 76% of respondents in South Africa noted that they feel there is a stigma around mental health disorders in society today. As we saw with the late John, there have been numerous cases of suicide claims where there were no mental health disclosures at application stage. We consistently see a lower level of mental health disclosures on application forms compared to what we would expect. Applicants may not feel comfortable in disclosing mental health problems, especially if an intermediary is involved in the process. It could also be the case that the application forms themselves aren't clear enough in the questions being asked, leading to more innocent non-disclosure.

**The GCS is the largest global survey on life insurance consumers in the world and conducted by ReMark, a SCOR Group Company.*

If we look at a history of mental health conditions, there are statistics that state that 90% of people who die by suicide are thought to have had a diagnosable mental health condition prior to their death. In the context of life insurance and medical underwriting, for applicants who have been diagnosed with a mental health condition, we are aiming for clear and honest disclosures. For the

applicants that are yet to be diagnosed, we are aiming to risk-assess the applicants through the current questions that are asked.

All application forms ask some type of question on mental illness. They often start with phrases such as "have you ever had...", "do you have trouble with...", or "have you ever been diagnosed with ...". These phrases are then followed by lists of conditions, from depression, stress, and panic attacks to psychiatric disorders to name a few. Often, a lot of medical jargon is used. If an applicant answers yes to such a question, a more comprehensive mental health questionnaire will be sent to be filled out. Based on the answers to this questionnaire, the applicant will be offered terms relevant to their circumstances, if possible.

On reviewing the questions, often depression, anxiety, and stress are included together with severe neurological or nervous system disorders such as epilepsy. If we structure application forms in this way, the applicants could be confused as to what disclosure the insurer is intending. If, for example, an applicant has mild symptoms of depression, but depression is listed together with brain disorders or epilepsy, the applicants might not disclose the mild depression. This may not be intentional non-disclosure, just a misunderstanding of what the insurer is looking for.



Not convinced? Take the statistics that suggest that one in four people suffer from a diagnosed mental health issue every year. If we compare this 25% to a large sample of completed application forms, we found that only 10% of applications disclosed a mental health concern. This is far less than the one-in-four.

Potential Areas for Improvement

So, even though all application forms have a question on mental illness in some form or another, we still see mental health disclosures at levels far lower than we would expect. We believe that there is room to improve the underwriting process to get better disclosures. Behavioral economics techniques can be very useful in this regard, and can help to structure questions optimally. This will ensure that we are not only asking the right questions, but also asking them in the best way.

For example, how would we assess 'the yet to be diagnosed' in the life insurance process? For suicide risk, we would be looking to understand the clinical symptoms that could relate to suicide risk. Some examples include feelings of hopelessness and being tired all the time. Currently, in South Africa, there does not appear to be any insurance application forms that have questions relating to understanding these clinical

symptoms. This is an area that we could explore further. For those yet to be diagnosed with a mental health condition, we should look to have an effective question that looks more at clinical symptoms. If symptoms are revealed, this could trigger some form of comprehensive future vulnerability questionnaire, which may be especially helpful since mental health is still so stigmatised.

The most influential risk factor for suicide is a previous suicide attempt. When assessing application forms, most application forms do not ask a question relating directly to a history of a suicide attempt. This is

quite unexpected, as many applicants with prior suicide attempts may not have received treatment or been diagnosed with a mental illness. As such, the current process could completely miss this disclosure if it isn't being asked directly.

Conclusion

Mental health is an important topic for the insurance industry and the evidence is clear: suicide risk is a significant driver in insurance claims experience. Based on the trends in mental health and the analysis of the suicide incidence experience over policy duration, we believe that the underwriting process could assess mental health and suicide risk far better.

The customer journey is a central aspect in the application design process, and we need to strike a balance between the effectiveness of the questions and the length of time it takes a customer to complete the application form.

We want to be in a position where we encourage better disclosures to mental health questions, so we can provide the most appropriate terms to our clients. We can't expect applicants to disclose something that we haven't asked them about. In the end, "if you don't ask the right questions, you do not get the right answers." – *Edward Hodnett.* 

BOOK REVIEW

Mihloti ya Ntsako: Journeys with The Bongi Dhlomo Collection

Written by Pfunzo Sidogi, Collection by Bongi Dhlomo

Publisher: Javett Art Centre at the University of Pretoria (Javett-UP) in association with the Javett Foundation

ISBN: 978-0-6397-1824-8

Book can be purchased from Latitudes Online (<https://latitudes.online/artworks/publication.html>) for R750 (excl. VAT) or in-store at the Javett Art Centre at the University of Pretoria



The book gives excellent insight into the period from 1952 to the present. It contains a walk-through history in a way that resonated strongly with me.

In 2016, the Javett Foundation commissioned Bongi Dhlomo-Mautloa to establish a collection of 20th-century South African art by black artists. In doing so, the late Michael Javett, the chief patron of the Foundation, wanted to see Dhlomo's eye through the collection, and also see "how black artists saw their immediate community, how they felt about their existence, and how they saw South Africa." Michael Javett was a retired businessman who studied law at the University of the Witwatersrand and practised as an attorney at Webber Wentzel. He moved to London to join the international law firm, Allen & Overy. Then he began a career in finance (as a merchant banker) at Hill Samuel. On his return to South Africa, he established the Unisec Group, which was later sold to Standard Bank. He also founded Tolux SA, which has since become Brait. He turned his attention to philanthropy in 2006 and was also a thoroughbred owner.

The book gives excellent insight into the period from 1952 to the present. It contains a walk-through history in a way that resonated strongly with me. With so many of the artists also coming from Soweto and having known the Funda Art Centre in Soweto well, I could see the parallels and the life of Bongi Dhlomo as she lived in Alexandra and having worked at the Alex Arts Centre and others in Johannesburg and Durban, as she is from KwaZulu-Natal. For that reason, the artwork Mgodoyi 5 by David Koloane (1938 – 2019) is one of my favourites.

I often get the question why is it that, as an actuary, I decided to become an art entrepreneur. Given the number of artworks in the backgrounds of the people I have met with in virtual ASSA committee meetings over the past two years, the beautiful Zanele Muholi photograph in the background as an actuary based in the UK, moderated a discussion at the 2022 ASSA Annual Convention, and also the history of art in the portfolio of the British Rail Pension Fund's foray into investing in art from 1974 to 1980 to beat raging UK inflation at the time, it should not come as a surprise. It also shouldn't come as a surprise, especially as my family is decidedly both left- and right-brained as all of my siblings are known for their forays into being DJs while being members of various professions; sadly, I am still waiting for my lessons, so I have missed out on the opportunity to be like the Goldman Sachs CEO David Solomon.

The book Mihloti ya Ntsako covers three broad aspects:

- How The Bongi Dhlomo Collection came about,
- Some background and history about Bongi Dhlomo and the environment in which she operated throughout her extraordinary career as an artist, a cultural worker, an activist, a curator, a judge and a collector, and
- Some of the artworks in the collection itself.

The third section is where Sidogi provides a critical social history of black artists in the 20th century in South Africa. And even in 2023, many of those themes are still at play concerning African art in general. The challenge of the relative pricing of artworks by black and white artists is something that plagues us, even today and the challenges with developing a diverse and representative local collector base – many a visit to an exhibition opening highlights this challenge. Ensuring a local collector base also provides stability to pricing as opposed to only having collectors based in North America or Europe, where their tastes may change and create a crash in the economy of the artworks of an artist. Sidogi also outlines the problematic ways black artists were packaged and narrated, for example, branding Eli Kobeli as the “Chagall of Soweto” and Dumile Feni as the “Goya of the townships”. This third section outlines all the inspiration for the current activism that I and many others engage in around the inclusion of many South African Masters and many artists and collectors today. My only criticism (and it is really nit-picking) or differing opinion is a small discussion in a section on Religious Images and Blackness regarding how African (in addition to European) modernity came about. It would be good to engage with other readers and unpack this part with others’ views.

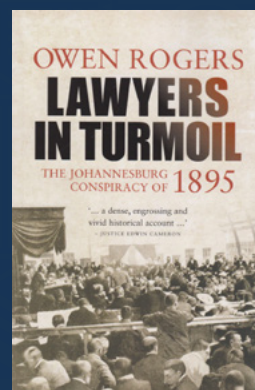
The actuarial community is now familiar with the concepts of diversity, equity and inclusion. This collection is an example of radical inclusion, especially when considering art collections and how their patron generally names them. My reading of the book was enriched as it was some seven months after I attended a walkabout at the Javett Art Centre on 27 April 2022 – Freedom Day. I had deliberately chosen that day to visit not only because the entrance is free on public holidays, but also because I know this collection is assisting in challenging the documented art history of South Africa to include the oeuvres of artists who might not have been included simply because of the history of South Africa. One aspect of diversity (or lack thereof) acknowledged by both Sidogi and Dhlomo is the lack of black female artists in the collection. It reflects the lack of art historical acknowledgement of black female artists. And indeed, it was a great gift to celebrate the anniversary of democracy in our country; similarly, the book offers a masterclass in thinking about diversity, equity and inclusion using art and the art world as the thought canvas on which to explore the themes.

There are probably many books written about South African modern and contemporary art. Still, this one is

very different and is a read that anyone who does not know anything about art nor is a collector will learn significantly from, be they South African or not. While the art exhibition on which the collection is based, Yakhal’inkomo (named after the song with the same title by saxophonist Winston Mankunku Ngozi), ended in January 2023, one can experience it somewhat through a read of this book, which is why I recommend it. You might want to ask Javett for the playlist of the sonic experience that was part of the exhibition to enhance your experience as you page through the collection.

After reading all I have said about this magnificent collection, I know my fellow actuaries – you’re still stuck wondering how the British Rail Pension Fund’s foray into investing in art went. According to a Wall Street Journal article from 1996, the result was “respectable, if not spectacular”; when they sold the last of the artworks in the portfolio, they had achieved a 13.1% return per annum, which was nearly 6% above inflation over the 22-year life of the investment. Mihloti ya Ntsako means “tears of joy” in Xitsonga 🇸🇩

Reviewed by **Karabo Morule**



Lawyers in turmoil: The Johannesburg Conspiracy of 1985

Publisher: Stormberg

The Jameson Raid was a failed military incursion by a group of British colonialists (the Reformers) into the Zuid-Afrikaansche Republiek (ZAR) or what was also known as the Transvaal on 29 December 1895. The raid was led by Dr Leander Jameson with the intention of overthrowing the Boer government (presided over by Paul Kruger), and establishing British control over the gold mines in the Transvaal region. Some of the grievances that led to the raid were issues around the presiding government’s nepotism, corruption, maladministration and the granting of monopolies (particularly for dynamite and the railways).

The raid was quickly defeated by the Boer forces and Jameson and his men were taken prisoners on 2 January 1896 near Doornkop. Many historians have cited the Jameson Raid as being the prelude to and one of the main causes of the Boer War of 1899-1902.

On 10 April 1896, Paul Kruger authorised the prosecution of the prisoners on the charge of high treason. The trial was subsequently set down for 24 April 1896 and was described in the local press as the most important criminal trial that had ever been before a court of law in South Africa. The Market Building in Pretoria was identified as the only building large enough to accommodate the jury, the accused, the lawyers and spectators to the trial. It was fitted out as a temporary court which included the installation of electric lighting. Sentencing was passed on 28 April 1896, with four of the ringleaders being sentenced to death (‘hangen bij den nek’) by presiding Judge Reinhold Gregorowski. The sentencing was quickly met by public outrage such as from the Port Elizabeth Town Council that resolved to record ‘with indignation’ the ‘vindictive, unjustifiable and barbarous sentence’. The death sentence was commuted the next day.

In his book, Constitutional Court Judge Owen Rogers focuses on the lawyers involved in the unfolding drama of the Jameson Raid. In three distinct sections, he examines where they came from, what they did and what became of them. These include ten lawyers who were charged with treason, and others who were involved in a professional or judicial capacity in the trial of the accused men. During the crisis, three of the ZAR judges at the time, namely Kotzé, Jorissen and Ameshoff (familiar street names in Johannesburg) acted as advisers to the government and were included in the deliberations of the executive council. Other attorneys, particularly Charles Leonard, William Bell, Henry Hull and Edward Solomon played an important role in laying the commercial foundations of South Africa’s financial centre.

With the death of the last survivor of the April 1896 courtroom, namely that of Fritz Krause on 22 August 1959, the curtain finally fell on the Jameson Raid lawyers. Krause is described as perhaps the most colourful of the Jameson lawyers. Following the fall of Johannesburg, Krause became a prisoner of war. After serving a prison sentence in London, he returned to practicing as an advocate in 1905, thereafter taking up silk in 1912. In 1923, he was appointed as a Judge in the Transvaal Provincial Division and in February 1933

The underlying current of unholy greed, corruption, political posturing and evasiveness, is a stark reminder of how little politicians have progressed over the centuries.

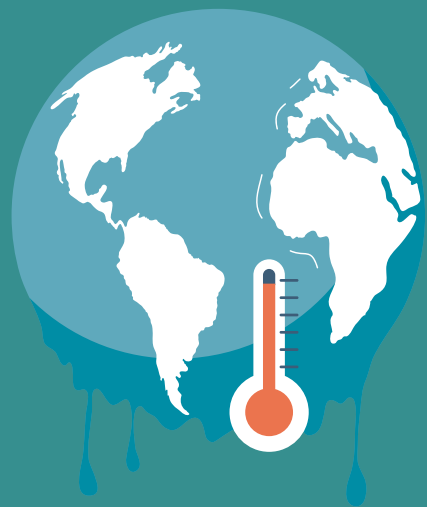
he was transferred to Bloemfontein as Judge President. Krause stated that ‘legislators should realise that their first duty was to serve their country, not their party’. In 1944 at a talk at the University of the Witwatersrand, he argued that all repressive legislation should be repealed, and that Africans should be provided with proper health, educational and housing services. He was also a strong proponent of prison reform.

The book is full of interesting historical treasures such as the following: Paul Kruger had a close association with the German Edouard Lippert and Lippert was a major beneficiary of the government’s policy of granting monopolies. In 1890, Lippert bought a portion of the farm Braamfontein, on which he established a plantation to supply wood to the mines. The plantation was named Sachsenwald and during the First World War the area, which had become a fashionable suburb, was given its anglicised name, Saxonwold. Saxonwold’s association with state capture can thus be traced back many years.

The underlying current of unholy greed, corruption, political posturing and evasiveness, is a stark reminder of how little politicians have progressed over the centuries. As relayed by the author, Mohandas Gandhi had noted never to forget the ‘paramount importance of facts’. The facts mean truth: ‘once we adhere to truth, the law comes to our aid naturally’.

The author’s rigorous and meticulous research, coupled with a writing style that is fluid and elegant, is testament to the power of the human intellect. The book is a fascinating and highly recommended read for actuaries with an interest in legal history. 🇸🇩

Reviewed by **Gregory Whittaker**



ACTUARIAL SKILLS

critical in assessing the risks
of global climate change

THE ROLE OF THE ACTUARY IS TO QUANTIFY AND MANAGE FUTURE RISK TO ENSURE THAT ORGANISATIONS ARE PREPARED TO MANAGE POTENTIAL CHALLENGES.

Environmental and social risks and their potential effect on a company's bottom line are no exception. For example, global climate change affects life insurers because it influences mortality rates through an accompanying increase in extreme weather events, with resulting effects on vector-driven diseases, water, air and food qualities, migration and civil conflict.

Actuarial skills are therefore increasingly recognised as critical in assessing the risks of global climate change, with actuaries becoming involved in a number of critical projects. In the United States and Canada, for example, the actuarial profession has recently launched the Actuarial Climate Index to measure variability in climate. Work on the extension of this index to cover Europe is already underway.

In the UK, the Institute and Faculty of Actuaries (IFoA) has addressed the issue of claims for damages caused by contributors to climate change. The IFoA has also signed a statement by the Overseas Development Institute (ODI) urging the G20 Governments to honour their long-standing commitment to phase out fossil-fuel subsidies.

A working group of the International Actuarial Association (IAA) is currently researching the effects of global climate change on mortality. A member of this working group has further been selected as part of an expert panel advising the European Commission on policies targeting sustainable finance, specifically within the context of the Capital Markets Union.

The IAA is also involved in the Warsaw International Mechanism, tasked by the United Nations Framework Convention on Climate Change (UNFCCC) with risk-management approaches to loss and damage associated with the adverse effects of climate change, including slow-onset impacts such as sea-level rises.

Both the IAA and the IFoA have submitted responses to the Task Force on Climate-Related Financial Disclosures established by the Financial Stability Board, an international body that monitors and makes recommendations about the global financial system.

Furthermore, the IAA is working on the regulation and pricing of carbon emissions, the effects of climate change on government budgets, and the usefulness and limitations of insurance as it relates to the effects of climate change on vulnerable populations. In light of the Paris Agreement, the IAA has already drafted a paper on the monitoring of progress towards the stabilisation of CO₂ concentration in the atmosphere.

The IAA is additionally collaborating with the United Nations Environmental Programme's Principles for Sustainable Insurance and with the Organisation for Economic Co-operation and Development on disaster recovery.

It is clear that the actuarial profession sees the need to embrace all three domains of the triple bottom line - environmental (or ecological), social and economic. In recognising this, the IAA is also extending its knowledge on ecological economics and on formulating measures that can be used for environmental, social and economic accountability by entities in both the public and private sectors.



**ACTUARIAL SOCIETY
OF SOUTH AFRICA**



THE ACTUARIAL SOCIETY TURNS 75

A timeline of the key milestones

The Actuarial Society of South Africa commemorates 75 years of serving the public interest through regulating and supporting the Actuarial profession in South Africa.

As we look forward to the future, we look back at our history and track just how far we've come in growing and diversifying the profession.

THE ACTUARIAL SOCIETY OF SOUTH AFRICA TIMELINE

William Marshall, AIA, founded the Cape Town branch of the Colonial Mutual in 1883. He was the first actuary that worked in South Africa. The inaugural meeting of the Actuarial Society of South Africa was held on **22 December 1948**. The timeline that follows draws attention to some of the highlights over the past 70+ years.



1948

22 December 1948: Inaugural meeting of the Actuarial Society of South Africa. David Spence-Fraser is elected as first President.

1955

Pat Wood (nee Potgieter) became the first South African woman to qualify as an actuary.

1958

The Assessment of Compensation for Loss and Support by R Howroyd, FIA, and F J Howroyd, BA LLB, is published in the South African Law Journal. It is the first published paper by a member of the Society.

1966

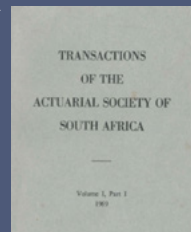
The publication of the SA 56-62 Mortality Tables marks one of the most important milestones for the Society.

1967

- The first sessional meeting of the Society is held in Cape Town (14 June): Unit Trusts and Equity-linked Endowment Assurances, by Grant and Kingsworth.
- The first paper by a member of the Society to be discussed at sessional meetings is *The Distribution of Profits arising from Equity Investments* by John van der Linde.

1969

- Tom Murray donates money for a prize fund. This evolves into the Murray Medal, the Society's most prestigious award.
- John van der Linde, as editor, produces the first edition of the *Transactions of the Actuarial Society of South Africa*. "It was the best way to ensure my paper was published in it," he explained afterwards.



1970

The Society's Coat of Arms is registered with the Bureau of Heraldry.



1972

The first Convention is held in Cape Town (20 October).

1973

- The first Murray Medal is awarded to Tom Murray.
- The first purely actuarial courses are presented at the University of Cape Town.



1986

The Guide to Professional Conduct is issued. Council follows this by issuing an explanatory memorandum on the Guide.

1983

The Fixed Interest Indices are launched.

1978

The JSE-Actuaries Index is launched.

1987

The AIDS Committee is established. The world really took notice of AIDS for the first time in the 1980s, and the Committee was established to create and enhance awareness of the pandemic among members of the Society and other decision-makers in the long-term insurance industry.



Peter Doyle's AIDS Model in embryonic stage.

1995

- The Swiss Re Prize is introduced. It was awarded for the first time in 1998.
- The IT Committee is established and the Society's first website is regarded as one of the best by its peers in the international actuarial community.
- The AGM agrees to a motion to appoint a full-time executive director, i.e. establish an office.

1996

- The implementation of the Continuing Professional Development Scheme makes CPD compulsory.
- The ASSA 500 AIDS Model, primarily designed to make users more aware of the impact of AIDS on mortality, is released. ASSA 500 was followed by various other models, e.g. ASSA 600, ASSA 2000, ASSA 2002, ASSA 2003 and ASSA 2008.
- Wim Els appointed the first full time staff member.

1998

The first meetings of the International Actuarial Association to be held in Africa take place at Spier, as part of the Society's 50th anniversary celebrations.

1999

- RGA Prizes for Best Paper at the Convention, Best Paper by First-time Authors and Best Published Paper are announced.
- The Research Committee is established. Rob Thomson is the first Chair. Rob Dorrington and Michael Leeman are the members.



International Presidents and Past Presidents of the Society at Spier.



Several years after the prizes were announced, they still draw broad smiles from recipients. Roseanne and Lara in 2006.

2000

2001

- The Diversity Committee is established chaired by the late Hillary Murashiki.
- Discovery agrees to sponsor the Society's prize for the best honours project at a South African university. Leigh Johnson and Brendan Horwitz share the inaugural prize.
- Anthony Asher wins the first RGA Prize for the best paper at the Convention.



- *Actuaries on the Move*, a joint venture with Metropolitan, is launched as the Diversity Committee's first pilot programme in Soweto.
- The first edition of the South African Actuarial Journal is published. Rob Thomson (above) is the editor.



1992

- The President's Award is introduced, and awarded to the Sunshine Kid, Rob Dorrington
- Peter Lamprecht and Joubert Ferreira present the first professionalism course for newly qualified Fellows (25 June).
- The Actuarial Society office moves from the Sanlam campus to the Old Mutual campus.

2003

2004

- Janina Slawski becomes the first woman to become the President of the Society.
- ASSA'ndaba, an information pamphlet in pony newspaper format, is published. The first one deals with surplus in retirement funds. It was very popular. A subsequent one, on AIDS modelling, was discussed at a meeting where members of the press were present.
- Ranti Mothapo is the first black South African to qualify as an actuary.
- The revised Disciplinary Scheme is implemented. It provides for non-actuaries to serve on the Disciplinary Committee. This is a new development in the actuarial world.
- The South African version of UK Professional Conduct Standards is introduced.



Bob Conger (CAS), Janina, Joubert Ferreira, Jim McGinnitie (Society of Actuaries) at the 2003 Convention, where she took over from Joubert.

- The Presidents' Forum, a meeting of Presidents of Anglophone organisations and the IAA Presidents, is hosted at Bakubung, Pilanesberg. This was the last Presidents' Forum that did not form part of the regular IAA meetings.
- Peter Clark, Thamsanqa Kambule, and Gloria Serobe become the first honorary members of the Society.
- The first "local content" Fellowship papers are written. These were UK papers adapted for the South African environment.
- Gustav Jenkins becomes the first Student Representative on Council.

2002

Two-year presidency comes into effect. Joubert Ferreira is the first two-year President.

2010

- The International Congress of Actuaries, the ICA 2010, is held in Cape Town with Desmond Smith as the Organising Committee Chairperson.
- ICA 2010 attracts over 1,500 delegates and 373 accompanying Persons, with 103 countries represented, making it a truly international and very well-attended event.
- The Society and the ICA 2010 Organising Committee present a donation to the Peter Clark Memorial Fund.
- The Society establishes a Banking Committee Chaired by Michael Tichareva, and formally recognises banking as a practice area.



Desmond Smith (Chair: Organising Committee), Yves Guerard (Secretary General: IAA) and Peter Doyle (ASSA President) with a plaque thanking the Society for arranging and hosting the ICA 2010 in Cape Town.

2011

- The Society becomes an award signatory to the CERA Treaty.
- Arthur Els and Xiao Yu are the Society's first CERAs.
- The Africa Seminar becomes part of the Convention. It is hosted in the boardroom of GenRe, which is also the sole sponsor of the event.



Xiao Yu

Arthur Els

2012

- Themba Gamedze becomes the first black President of the Society.
- The Actuarial Governance Board issues a revised disciplinary procedure. At the time, it is pioneering work, allowing the use of provisions of the Arbitration Act.
- Desmond Smith is the first actuary from Africa to serve as IAA President.
- Leigh Johnson co-authors the paper that wins the RGA Prize for best paper at the Convention. This means he has won the Discovery Prize and all three RGA Prizes.
- FASSA, AMASSA and CERA are registered with the South African Qualification Authority.
- The Society, through its Banking Committee, moots the development of a banking fellowship subject, and holds consultations with members before Council approval.



2005

ASABA was launched by members of the Society at NBC offices in Sandton to drive transformation of the demographics of the Society through development of black actuarial professionals, with Themba Gamedze as the first President and Ranti Mothapo as the Secretary General. ASABA has worked closely with the Society since then.

2006

- The Local Qualification Task Team, chaired by Andrew Gladwin, recommends the introduction of a South African actuarial qualification.
- The Constitution is amended to provide for the establishment of the Actuarial Governance Board.
- The marketing campaign for ICA2010 is launched in Paris.
- The Convention celebrates the 150th anniversary of the Faculty of Actuaries.

2007

- The new emblem is unveiled at the Convention.
- The Society's Transformation Charter is adopted. One of the best kept secrets in the organisation.
- An IAA Health Section Colloquium is hosted in Cape Town. Emile Stipp chaired the organising committee. As a dry run for the 2010 International Congress, it attracts a number of actuaries from other countries. And they are impressed. The fear of having to come to the Dark Continent and be chased by lions while on your way to the meeting is largely dispelled.
- The Actuarial Governance Board meets for the first time, chaired by Reg Munro as appointed by Council. The other members were Tom Wixley (appointed by SAICA), Mr Justice Ralph Zulman (appointed by the Chief Justice), and prof Philip Sutherland (appointed by the then FSB). The procedure was later changed to let the General Council of the Bar appoint a member, rather than the Chief Justice.

ACTUARIAL SOCIETY OF SOUTH AFRICA



The first Actuarial Governance Board: Reg Munro (Chair), Mr Justice Ralph Zulman, Tom Wixley, Prof Philip Sutherland.

2008

- Council delegates certain functions to operational boards: operations and finance, international affairs, professional matters and communications.
- The first purely South African fellowship exams are introduced in the first semester, set and marked locally.
- Emil Boeke appointed the first CEO of ASSA.

2009

- The Convention Lite is held as a two-day event with separate tracks for the various practice areas on Day One, as well as mainly professionalism and education issues on Day Two. This allows members to focus on the international congress in 2010.
- The Society establishes a task force chaired by Michael Tichareva to investigate the involvement of actuaries in banking
- Mutual Recognition Agreements are signed with the Institute of Actuaries and the Faculty of Actuaries.



Trevor Watkins (Head of Learning, Institute), Andrew Gladwin (Chair: ASSA Education Board), Nick Dumbreck (Institute President), Garth Griffin (ASSA President), Ronnie Bowie (Faculty President), Chris Daykin (Past President, Institute, Hon FASSA), Peter Dingwall (International Affairs Manager, Institute), and Peter Doyle (ASSA President-elect) at the signing of the MRAs.

2013

The Society starts development of a banking fellowship subject for actuaries, led by Michael Tichareva with Garth Griffin and Pravin Burra as experienced banking actuaries providing advice and oversight, and engages Australian banking actuaries for collaboration in the syllabus development process.

2014

- The Transformation Committee is restructured, with the President-elect as Chair ex officio. It reports directly to Council. It also has official representation from certain structures, including Actuaries without Frontiers, the SLC and ASABA.
- The Society enters into a partnership with PaperVideo to support maths education in previously disadvantaged communities. RGA was one of the first sponsors, and still supports the initiative



Paul Maree (Paper Video) demonstrates the use of the material, while Mike McDougall (Chair, Actuarial Society Education Trust), and Tjaart Esterhuyse (MD, RGA), and a learner at LEAP follow.

2015

- The first actuarial banking Fellowship subject in the world is introduced by the Society in South Africa, with the first exam written in the second semester, and Rolf Van Den Heever as the Principal Examiner. No candidates pass this one.
- The first Young Members' Convention is hosted as a joint venture between the Society and ASABA, and sponsored by Investec.



2016

- The Society hosts IAA Council and Committee meetings in Cape Town. The dinner doubles as a farewell function for IAA Executive Director, Nicole Seguin.
- Michael Tichareva, Chair of the Society's Banking Committee, is appointed as Chair of the newly established IAA Banking Working Group.

● 2017

- The Society hosts the first international banking seminar for actuaries as part of the IAA meetings in Chicago.
- The idea of an international banking subject is mooted by the Society.
- The South African Actuary publication is introduced with the first edition published in March through online and interactive pdf. versions.

● 2019

The Society hosts a joint colloquium of five IAA Sections between 2 and 5 April in Cape Town: The theme is "The Modern Actuary: Challenge, Influence, Lead".



● 2020

- The Covid-19 Pandemic transforms the landscape of academia and work. The Society continues through the exam period – examinations are written strictly online and the Society staff continue to support members while working from home.
- For the first time since its inception, the ASSA Convention is hosted online.
- The Society enters into partnership with the IFoA in developing an international banking subject and exam.

● 2021

Development of international banking fellowship subjects at specialist and applications commences using the Society's fellowship banking subject as a base, led by Kudzai Chigiji.

● 2022

- ASSA rebrands with a new logo and colour scheme as part of the ongoing movement and diversification of the actuarial brand, with the new and improved brand identity including a new definition of the Society's logo and colours.



- The international banking fellowship specialist and applications subjects are introduced jointly with the IFoA, with the first exams written in the first semester. No international candidate passes the banking fellowship applications paper.

● 2023

The Society turns 75 years old! Thank you for being a part of our history and our future.

HEALTH WARNING:

Education can be a poverty trap!



Help us help more children to escape the poverty trap.

Contact Paper Video (**Chris Mills, 072 347 6154, chris@papervideo.co.za**) or the Actuarial Society Educational Trust (**Mike McDougall, 087 073 8952, mmcdougall@actuarialsociety.org.za**) and make education a powerful catalyst for change in more children's lives.



MIKE MCDUGALL – A COMPASSIONATE LEADER PASSIONATE ABOUT EMPOWERING PEOPLE TO DO GREAT THINGS

In this article, Mike McDougall shares sound wisdom from his journey through the actuarial profession. Mike has a great deal of leadership experience and is passionate about transforming the profession to meet the growing demand for actuarial skills in South Africa and beyond.

Mike started out as an actuarial analyst at Southern Life and scaled up the ladder to become the Chief Financial Officer at Metropolitan Retail (in the MMI group). He currently serves as the CEO of the Actuarial Society of South Africa and has accomplished many remarkable feats during his tenure, such as enabling the move to online examinations during the pandemic, and striving towards the transformation of the actuarial profession.

It is no wonder Mike was awarded the prestigious Presidential Award by ASSA in 2022. What particularly stands out about Mike is his passion to serve people. As a leader, he has found ways to empower teams to achieve better results and realise their potential. Mike would like to see actuarial skills deployed widely to meet customer needs and address wider long-standing and diverse challenges.

May you provide a background of where you grew up?

I grew up in the Underberg, a dairy and cattle farming district nestled in Kwa Zulu Natal. The idyllic beauty of the Drakensberg is something I have always treasured.

Did you always want to study Actuarial Science?

Growing up in Underberg, I had never heard of an actuary or an accountant, until someone told me that I should consider becoming an actuary because of my strong mathematical abilities. It all began to add up when I was in High School, and I took part in the Mathematics Olympiad sponsored by Old Mutual. Everyone that participated in the Olympiad and achieved above a certain mark would receive a pamphlet about the actuarial program and bursary sponsored by Old Mutual.

When I received my package, I wrote to the Actuarial Society to find out more about the profession, and they sent me a detailed letter explaining more about the profession, signed by the honorary secretary, Desmond Smith – someone I came to know when working for ASSA and respected hugely as a mentor and role model. I chose Actuarial Science because I enjoyed Mathematics and I wanted to study in Cape Town, following in my sister's footsteps. Furthermore, most insurers offered actuarial bursaries in those days. I was sponsored by Southern Life, which was later merged with Momentum.

Here's a quick story that comes to mind about the value of branding. When I was in grade one, some Southern Life representatives were selling policies to

I wrote to the Actuarial Society to find out more about the profession, and they sent me a detailed letter explaining more about the profession, signed by the honorary secretary, Desmond Smith

the teachers. They handed branded nametags to the grade 1 kids. This brand recognition, almost 12 years later, clinched my decision to accept the Southern Life bursary.

Who was the biggest influence in your life?

At each stage of my life, there have been different people that have inspired me. For example, the headmaster and senior teacher at the second primary school I attended set a good foundation for me. Mr. Brooks and Mr. Steere were their names, and they were very influential at that early stage of my life.

I have also been fortunate enough to report to several very wise people in my journey and I simply cannot name them all for fear of leaving anyone out. All this has culminated in where I am now by causing me to believe that I could succeed in this profession. I have had many learning moments from a lot of people who showed me how to carry myself with honesty and excellence in all my professional dealings.

For instance, when Southern Life merged with Momentum, this pushed me out of my comfort zone and into taking ownership of my own career. It allowed me to spend the next 3 years working in product development. From when I first started my actuarial studies, I had always wanted to work in product development, so I appreciated those 3 years. The lessons from that phase of my career were about the importance of grasping challenges and seeking opportunities to grow.

This was until a head-hunter called me with an enticing opportunity at Metropolitan. Moving onto Metropolitan, I gained a lot of insight under the influence of the group CEO, Peter Doyle, as well as from the CEOs of Metropolitan Retail, Derek Pead and Phillip Matlakala. I had the privilege of working with some exceptional actuarial students and recently qualified actuaries who have gone on to be very successful either in Metropolitan or in other businesses. They were the young people in the profession at that time, who brought a lot of energy and new ideas. I was privileged to work with people that really inspired and challenged me.

Derek Pead gave me a one-line job description that moved me to action when he said, “I don’t think the business is doing very well, go and find out what’s wrong and let’s change it”. That job description served me for the next 11 years, even though the business went on to grow and thrive. What became obvious was the disconnect between what operational management were focusing on and the factors influencing the financial results. My focus was on developing measures and tools that were accessible to sales and operational management while being aligned to the financial results.

You mentioned your love and eagerness to work in product development. What drew your attention in that route?

Product development always appealed to me as one of the more exciting areas of actuarial work as it provided space for creativity as well as the need to try to match product features to customer needs. I liked the wide involvement from product conceptualisation, to design, pricing, engagement with reinsurers and implementation. However, I did become disillusioned as I sensed that the high level of price competition led to a widening gap between what products were offering and what customers thought they were buying. I raised this concern in my 2001 convention paper (“Jaguars and Jalopies”), and after 17 years away from this part of the market, I was disappointed to see that the concerns I had raised in that paper had materialized when in 2020 I co-wrote a paper with Paul Truysens (“The Boiling Frog”).

You mentioned that you were concerned with the rate at which pricing reviews were taking place. Why was this?

The market was so price competitive, and brokers saw risk as a commodity such that companies would sell a product as a whole life product with a guaranteed term of five years and a discount rate much higher than the market yields. This meant the premiums were too low to provide long term sustainability of the policies. The companies would then wait long after the premium guarantee period before reviewing the premiums. This meant that there were large differences between the initial guaranteed premiums and the reviewed premiums which often were unaffordable to the insured. This was taking place because the market was too price competitive without, in my view, the other product features being understood by customers. So lower upfront premiums meant significantly higher premiums at later stages.

Congratulations on receiving the ASSA Presidential Award. What are some of the challenges and highlights you experienced in your tenure as CEO of ASSA, and in your previous leadership role at Metropolitan?

One of the highlights I enjoyed was that I got to work with some great people who were the strength of the team. One of the things we had to do during the lockdown was to empower people to know that they could do great things. We were not meeting physically but everyone on the team understood how to make the necessary decisions and ensure that all systems were functional, despite some major obstacles. I believe that people in hierarchical leadership roles do not have the monopoly on solutions to challenges faced by business. Our focus was on empowering everyone in the organisation to help find solutions to the challenges we faced. While mistakes and wrong decisions were made, we had the flexibility to change decisions and learn from experience.

I learnt this at Metropolitan when we introduced Deep Dive meetings. When we entered these meetings, we left our hierarchical positions at the door with everyone in the meeting having an equal voice in brainstorming the challenge and potential solutions. We also held innovation days, where staff could work on ideas that might lead to new revenue ideas or solutions to existing challenges.

My role in ASSA is different, because it’s less about my activities as an actuary and more about developing future actuaries. The key challenge we have faced is regarding how to grow and transform the profession

and operate in wider fields. These are key areas that we wish to accelerate in the profession. We have made some progress with the recent development of normative skills, which allow ASSA members to be more effective in their work and equipping them for broader business success. A senior actuary in a major Actuarial Training Officers described recently qualified FASSA’s as being three years more advanced than those from other associations that they employ.

The development of the TASSA designation is a significant milestone on the road to qualification, as it recognizes that the member has mastered the foundational skills. This is getting increasing recognition from employers in the recruitment process.

The Actuarial Society Educational Trust (ASET) is also very important to me as it empowers the next generation of children from poor backgrounds to fulfill their potential and for some to enter the profession. Supporting and engaging with the founders and leaders of Paper Video, WeSolve4X, and Christel House has been truly inspirational.

As a leader, how did you get people on your team to open up and speak up? How would you advise young people to find their voice in a profession where they are surrounded by many great minds?

Honestly, I am naturally shy and found myself too nervous to speak up in meetings during my first few years of work. As a consequence, when I moved into leadership roles, I have been keen to find ways to encourage all members of the team to be able to express themselves. The most important ingredient has been for team members to know that those in leadership positions really care what they think, and must have confidence that they have ideas as good or better than the leaders hold themselves. What has worked for me has been a combination of “Deep Dive” and “Open Mike” meetings as well as an open door and open email box. While Deep Dives focused on particular challenges, Open Mike meetings are meetings without agendas for up to 15 staff members who have license to bring up any issue or share any information. However, I was slow to learn that this approach needs to be implemented in a culturally sensitive manner especially when trying to encourage new members of the team to participate openly. I believe that over the years I have gained as much, if not more, from these meetings as I have been exposed to both the wisdom and experience of more senior staff and the energy, fresh thinking and

enthusiasm of recent graduates.

What do you appreciate the most about being an actuary?

As an actuary we learn techniques for solving problems and answering questions that haven’t even been asked yet. We use actuarial science to solve problems in different spaces. The way we apply our skills and contribute to the world places emphasis on problem solving. I always enjoyed this more than working with strict limitations or boundaries. I appreciate that we tend to start solidly on first principles and the profession itself is quite dynamic. Furthermore, because the profession attracts a lot of bright people, your mind can be expanded without you even trying just as you engage in conversations.

What’s a day in your life like from start to finish?

I always start my weekdays with vigorous exercise such as 12 km runs. Working remotely buys me time because I don’t have to commute, so I get to work shortly after exercising. My work through the day is a combination of meetings and reports. In the evenings I make time to read widely beyond my work because this is how one learns things in diverse fields that can be applied to understand work challenges and broaden horizons. By 10 p.m. I try to be asleep so that I have sufficient energy for the next day. I always try to take a break from work over the weekend, go for longer runs, spend time with family and have some quiet time. Family is important to me and, second to my faith, is central to all my life choices – after which comes work, fortune, fitness, fellowship and everything else.

Any advice for our readers?

I would say it’s most important to be humble, to know that you are never the cleverest in the room so that you consider all insights and learn from others. In a leadership role, I would say the best way to get results is if the leader is serving and supporting the team while ensuring strategic alignment.

What is your favourite travel destination?

My job affords me various opportunities to travel across the world. However, my favourite place is a quiet and scenic place near Robertson in the Western Cape. It’s a lovely farm that rents out cottages allowing one to experience beautiful scenery in the mountains. I find this very refreshing, as it takes me back to having spent my childhood in a similar setting. 

Karabo Morule – A global leader leading from the front through diligence and influence

by Lydia Mutepefa: member of the SA Actuary Editorial Team



KARABO MORULE

In this interview, we speak to someone who achieved great heights in the actuarial profession from a very young age due to her diligence, which brought forth excellence.

Karabo Morule is the second black woman to qualify as an actuary in South Africa and was the first black female actuary to sit on Old Mutual's Executive Committee.

Karabo matriculated in 1999 and went on to study Actuarial Science at the University of Cape Town where she completed her degree with First Class Honours, a truly inspiring accomplishment. Karabo was recognised by the Mail & Guardian, in 2014, as one of 200 young South African leaders who are shaping the country's future. Karabo was also selected as a World Economic Forum Young Global Leader in 2018. The World Economic Forum Young Global Leaders comprises influential leaders from various nations across the world who have achieved the remarkable in their fields of endeavour.

In this article, Karabo shares some of her most vivid childhood memories, pivotal career moments, as well as advice to the coming generation of actuaries.

Please tell us about your early childhood memories?

I was born and raised in Diepkloof, on the Eastern side of Soweto. I spent most of my first year with my grandaunt, in Zone 3 in Diepkloof, because my parents were working. Thereafter, my parents moved up with me to another suburb in Diepkloof, and that's where we stayed until 1992. I did my pre-primary school in Diepkloof Zone 6, after which I went to Auckland Park Preparatory School and continued to Roedean (S.A.) for High School.

One of my fondest childhood memories was my graduation from creche. It was quite a memorable valedictory service where all the girls wore white, and all the boys wore the Zulu traditional attire. I remember this quite vividly because of how the ceremony was set up.

Another vivid memory that comes to mind was when we'd go to the church my family attended, where men and women sat on different sides of the church. This stood out for me because I never liked gender disparities. I, therefore, found myself taking on quite the role of a gender activist in later years. I also often found, growing up, that women bore the brunt of societal expectations more than men. Interestingly, my first toy of choice was a toy car game. I chose a red TOMY Volkswagen Beetle racing car game over the barbie doll my mum offered me, probably because my dad also drove a Beetle.

Who has been the biggest influence in your life and why?

I have been influenced by a lot of different people. For one thing, I was influenced greatly by my parents because parents tend to have a strong influence on the values one upholds. My grandparents also played a big role in my life. My paternal grandparents lived on a farm just outside of Mafikeng in the Northwest Province, and my siblings and I would visit them every December for a week. There was no plumbing or electricity, and because it didn't have the trappings of city life, we hated it as kids. Now I am starting to appreciate the simplicity of that life. I do remember feeling insecure about my Setswana while being there because I had paid more attention to my English in Primary School.

Another good influence was my maternal grandmother, she used to pray for us all the time. She had great strength and resilience shown in how she raised six children as a single parent after my maternal grandfather passed away.

My siblings also influenced me to a certain extent, particularly my older brother who went to study at UCT and I eventually followed in his footsteps.

I was also inspired by an uncle of mine who was an educator and ran the Funda Art Center in Soweto. The art center was formed after the 1976 Soweto uprising and focused on education while providing a gifted child program. This program nurtured the likes of Kabelo Mabalane. My uncle used to arrange school trips to the theatre or to Magaliesburg for children in the township, and this impressed me because it was not something



WEF Annual Meeting Davos May 2022 Panel Discussion on Financial Inclusion



children in the township would ordinarily do at that time.

The World Economic Forum shows you have experience on several company boards and are currently an independent non-executive director at Tyme Bank Holdings Ltd. How were you able to leverage yourself into these positions?

I operated at a senior executive level in my time at Old Mutual, where I was also a managing director for Personal Finance. My experience in senior executive positions helped prepare me to serve on different boards. Executive management required me to understand how a business runs, how to drive results and strategise which I was able to do due to the experience I had acquired. Directors are also often chosen for their specialist skills, whereas I was more of a generalist. I was very fortunate to have sat on some internal boards at Old Mutual where I gained some corporate governance skills as well.

What were the defining moments in your career that led you to scale up the ladder so early on?

One's performance often plays a pivotal role when promotion decisions are made. I suppose my performance was notable, and I was one of the first set of black female actuaries to qualify in South Africa, which meant that I could bring a different perspective in leadership. Hopefully I was also chosen for my personality because team spirit and diligence are traits that endear a person to be selected for leadership roles. I was also willing to work very hard in the roles I was in, and I was also able to manage and lead teams successfully. I consider leadership as being able to take people to a place they didn't ordinarily think they would be able to go, that is getting people to achieve what they never knew they had the potential to achieve.

According to WEF, you are the Founder of Capital Art which is an art fintech and is a service for art collectors to better manage their art collections. What inspired you to start Amara Strategic Investments and Capital Art? Have you always had a passion for art?

I have always had a passion for art, but this is not something I knew I always wanted to do. That said, I did have a yearning for entrepreneurship, and I wanted to build

something from scratch. My dad also loved photography and taking pictures of the family. Furthermore, when I was living in London, I got to visit several art galleries and museums. In that time.

I also got to learn that portraiture is the form of art that entails taking photographs of people, which my dad loved doing. My time in London inspired me to appreciate Visual Arts more, and I did a short course in digital photography at the Central St Martins School of Art and Design where I won the class prize for a project I put together.

I started collecting art in 2012, when I simply bought my first artwork and kept on collecting more. I recall telling my sister how I wanted to be a patron of the arts and the business enables me to do so, to a certain extent.

My business aims to support the arts by making sure we assist collectors in maximizing the value of their art collection portfolios through collection management and documentation. The aim of the business is to encourage more people to collect art, by providing the necessary tools and support while ensuring that they preserve the value of their art collections. This also supports artists.

Amara Strategic Investments is my holding company vehicle through which I invest as an angel investor, and one of the companies I invested in happens to be Capital Art. I am still very interested in angel investment pursuits, and I invested in another startup, a property technology business, started by a young entrepreneur from Limpopo.



2023 Investec Cape Town Art Fair Talks Programme

One should always try to learn as much as one can and excel in the work you are doing in order to deepen your expertise.

How were you able to build such a robust network of connections in your journey?

I found out in my days in Employee Benefits at Old Mutual, through a strength finders' assessment, that I am a connector. One of my strengths is that I enjoy meeting new people and talking to people in such a way as to connect them to each other in order to maximise what they gain from their relationships. I enjoy meeting new people and learning about new cultures, even as I grew up in Diepkloof with neighbours who came from different places.

Interestingly, when I was in Primary school in 1994, I joined a team with three or four South African students where we travelled and competed on a game show in the UK. That certainly fostered my love for travel and diversity. In 1998 I also participated in an online forum with over 3000 children from around the world. I was invited as one of the top 100 children to visit Massachusetts Institute of Technology where I got to interact with people from all around the world. All these experiences have certainly boosted my confidence and made it easy for me to communicate.

What are some of the key lessons you learnt while working in the actuarial profession?

I appreciate having studied actuarial science because I can combine the financial services with the social economics aspect of what actuaries do. I have appreciated that the products actuaries come up with assist society in so many ways. I have learnt so many things about products that people from my background would have been excluded from purchasing or understanding due to apartheid laws. I also appreciate that actuaries have a sense of justice and present something so refreshingly unique about financial services in that we do not just aim to maximise profits.

We aim to ensure that customers are treated fairly among other things. I also got to appreciate being an actuary in financial services because of the way everyone appreciates actuaries and considers them to be special, thus making it easy to chart one's path in a company. On



2019 ASSA Annual Convention with Karabo Morule as programme director

a lighter note, I doubt I would have had such a successful corporate career as an actuary working at Sasol for example.

What are some of the challenges you faced in your journey to qualifying?

One of the challenges I faced studying actuarial science in my early university days was that the products were often quite abstract to me as I had little exposure to them at the time. I never forgot my mum's advice, which was that other people had walked the path I was on successfully, therefore I could too. There is also a Setswana saying she used to quote that goes "Monate gao fele" and all her advice helped me contextualise everything well. This means there is always going to be another party, or concert etc., so it's best to focus and prioritise what matters in each season of life. To focus on excellence helped me so much because excellence not only makes you stand out, but it makes you so proficient in what you are doing. One should always try to learn as much as one can and excel in the work you are doing in order to deepen your expertise.

I also found it difficult to get access to advice because my parents didn't have office jobs and were self-employed. However, in my first job at JP Morgan, there was a banker who ran HR and was so gracious with lots of tidbits of information that he would often share with us. I also learnt to be very open to receiving the guidance that people offered me. It is crucial to be open to learn and receive guidance. I think back on how I used to dress for vac work, and it makes me realise that as people we need



to learn and be guided. Even in my time at Old Mutual, there were so many people who gave me great advice, so I'd say it's important to be humble and receive insight from other people.

What is a day in your life like?

I go to an aqua-aerobics class on some mornings, after which I get home and attend work meetings. I am generally at my desk all day trying to come up with a blog post, emailing galleries, checking my website statistics on Google Analytics, attending advisory work meetings, and looking for content or posting on social media. From 11 o'clock I am generally approving posts now that I have someone to manage the social media accounts on behalf of the company. I am usually at my desk until later at night after 20:30. Either my sister or myself cook dinner in the evenings. I also participate in a WhatsApp forum called 'Darkies in Tech' where they share insightful nuggets for people working in tech. I often go to sleep at 12:30 am.

On Saturdays I may attend an art exhibition or meet friends or former colleagues to discuss investments as part of an investment club. On Sunday mornings I go to church, then I take a walk with my brother around Zoo Lake because he loves fitness. We also sometimes have a Sunday lunch with my parents, and on Sunday evenings I enjoy watching Date My Family because it gives me a glimpse into how young people are socially engaging these days. It's so hilarious, especially when I go on Twitter to look at people's comments.

What's your favourite travel destination?

Dakar, Senegal. From an infrastructure perspective Senegal is quite challenging compared to Cape Town. Even getting

a taxi requires a few minutes of negotiation with a taxi driver. But I am really trying to improve my French, so I love going to Senegal. I have made a lot of friends there, and there is a thriving art culture, beautiful architecture, and fine restaurants. Their lifestyle intrigues me as I'd see people jogging along the beach all day or running up and down stairs etc.

Any advice to our readers?

I hold onto this view that if you work hard, you will receive much more than you expected. In my grade 11 and 12 I applied for bursaries and got accepted for a number of them, so I chose the Old Mutual Bursary. Then for my Matric exams, I achieved 100% for Additional Mathematics, which was unheard of at my school. So, the school decided to have a ceremony where Adelaide Tambo presented me with a prize for this achievement. They invited a journalist for this event and I ended up on the cover of the The Star, and Business Day.

It just so happened that the CEO of a boutique asset management firm was visiting Johannesburg and read a copy of the Business Day on the plane back to Cape Town. He invited my mum and I to meet with him and shared how he thought it was amazing that someone could achieve 100% in (Additional) Mathematics. He then offered me a full scholarship, but I expressed the concern that I wasn't going to get any work experience so I told him I would think about it. He then agreed that I could work for his company during my semester breaks for Vac Work. This story should inspire any young person to work hard, because hard work makes you stand out and places you in a position to take advantage of great opportunities. 



DESMOND SMITH

A LOSS TO SOUTH AFRICAN GOLF?

Following the recent passing of Desmond Smith (1947 – 2023), Murray medal winner, past president of both ASSA and the IAA, John van der Linde shared this article about how ASSA and the wider actuarial world almost missed out on Desmond's contribution to the profession.

Desmond told us this story years ago at one of our retired actuaries' lunches. His daughter Gillian expanded on this story at his Memorial Service.

Desmond was always a keen golfer. While in his teenage years, he and his father both had dreams of Desmond going far as a professional golfer.

By the way, Gillian told us that Desmond had shot his first "hole in one" when he was 16.

His father arranged for them to play a round of golf with their local Club Professional. He was so impressed with Desmond's golf that he offered him an apprenticeship and gave them the forms that had to be completed.

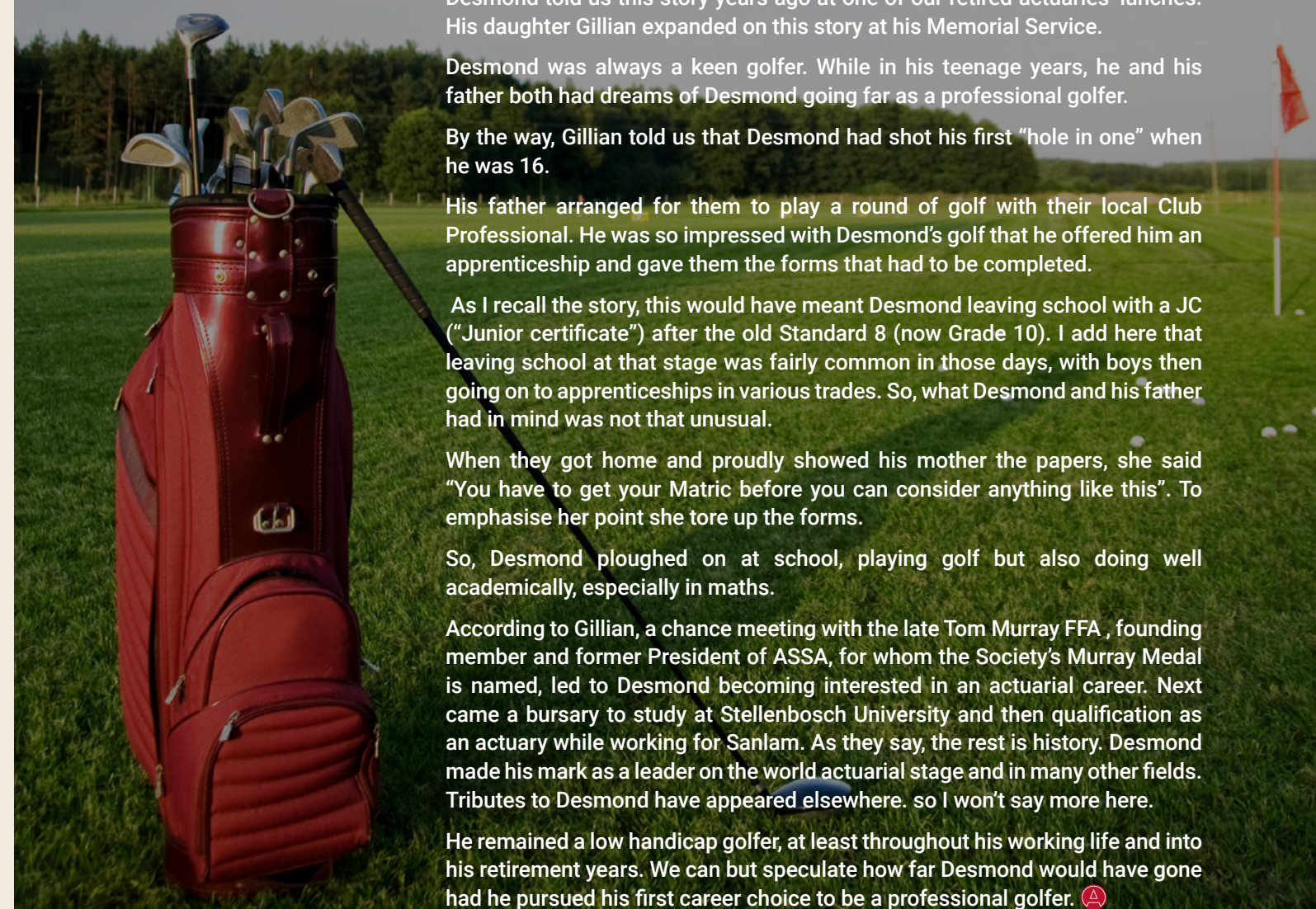
As I recall the story, this would have meant Desmond leaving school with a JC ("Junior certificate") after the old Standard 8 (now Grade 10). I add here that leaving school at that stage was fairly common in those days, with boys then going on to apprenticeships in various trades. So, what Desmond and his father had in mind was not that unusual.

When they got home and proudly showed his mother the papers, she said "You have to get your Matric before you can consider anything like this". To emphasise her point she tore up the forms.

So, Desmond ploughed on at school, playing golf but also doing well academically, especially in maths.

According to Gillian, a chance meeting with the late Tom Murray FFA, founding member and former President of ASSA, for whom the Society's Murray Medal is named, led to Desmond becoming interested in an actuarial career. Next came a bursary to study at Stellenbosch University and then qualification as an actuary while working for Sanlam. As they say, the rest is history. Desmond made his mark as a leader on the world actuarial stage and in many other fields. Tributes to Desmond have appeared elsewhere. so I won't say more here.

He remained a low handicap golfer, at least throughout his working life and into his retirement years. We can but speculate how far Desmond would have gone had he pursued his first career choice to be a professional golfer. 





THE ACTUARIAL WOMEN'S COMMITTEE

HOW DID IT START?

The Actuarial Women's Committee (AWC) provides a meeting place for qualified and aspiring female actuaries. It originally started as a lunch table, meant to connect female actuarial professionals and to provide a platform for them to empower and uplift one another.

Since then, the committee has grown and today consists of 23 active committee members. The AWC operates as a sub-committee of ASABA, and caters for women of all races and backgrounds.

WHAT DO WE DO?

THE AWC'S OBJECTIVES ARE:

- To increase the number of females who pursue an actuarial career (Sub-Committee: Outreach)
- To increase the number of qualified female actuaries in South Africa (Sub-Committee: Education)
- To promote the advancement of female actuaries in the workplace (Sub-Committee: Mentorship)
- To provide a forum in which aspiring female actuaries can network and identify sponsors (Sub-Committee: Events)
- To develop female actuarial leaders in the industry including increasing the number of females undertaking actuarial research (Sub-Committee: Leadership Development)
- To increase the number of females undertaking actuarial research (Sub-Committee: Research Development)

In addition to the objectives aligned sub-committees, we have the following supporting functions:

- Secretary General and Treasurer: Supports the Chair with the administration and operations of the AWC, as well as budgeting and management of spent.
- Head of Branding and Social Media: Responsible for branding of all external communications and management of our social media channels (Instagram, LinkedIn and Facebook).
- Head of Communications: Driving the ideas and content for the regular AWC Newsletter and serving as its editor in chief thereof.

In the following sections, we will share more details on the various sub-committees with regards to the purpose of the sub-committee and the current initiatives within it.



OUTREACH SUB-COMMITTEE

PURPOSE

- To increase the number of females who pursue an actuarial career, by focusing on initiatives at schools and universities.
- To involve the actuarial community in outreach initiatives.

INITIATIVES

- Career Fair for all universities (in collaboration with ASABA Mentorship): The Career Fair presents opportunities to bring together inspiring representatives from the actuarial industry and passionate university students from all over South Africa, and to create mutually beneficial relationships. The fair allows recruiters to advertise their employment and bursary offerings and share invaluable advice with students. The students are presented with the opportunity to showcase their talents by participating in one-on-one discussions with recruiters and are able to gain a practical understanding of what their futures as actuaries may look like. The virtual fair is hosted over three days, with one day of empowering talks to help the students prepare for their bright futures.
- NextGen AWC - University level (in collaboration with ASABA Mentorship): This initiative connects with the female members of ASABA University Chapters where we provide support in terms of getting them ready for the next step in their

- journeys and from a mental resilience perspective.
- NextGen AWC - School level (in collaboration with ASABA Schools Collaboration): This initiative is aimed at grade 10 to 12 learners who are taking mathematics, to create awareness of the various benefits of an actuarial career, explain the education and qualification journey and provide an overview of bursary options.

One of the The AWC’s purposes is Ensuring young female actuarial leaders have a network of professionals to support and assist them

EDUCATION SUB-COMMITTEE

PURPOSE

- To increase the number of qualified female actuaries in South Africa

INITIATIVES

- Future Fellows: This is a 2.5-month exam preparation support course for the F200s subjects, which includes allocation of a technical mentor, exam technique guidance and support in mental preparation.

- F100s support: a new initiative starting in 2023 aimed at supporting ladies who are writing the F100s.
- Pre-exam motivation/de-stress events: These events are aimed at motivating and supporting females writing exams in managing pressure in the lead up to exam season.

MENTORSHIP

PURPOSE

- To promote the advancement of female actuaries in the workplace by:
- Providing a platform for the transfer of knowledge and skills of female actuaries in South Africa.
 - Improving professionalism and other workplace skills of female actuaries in South Africa.
 - Identifying current barriers women are facing and providing support in addressing these.

INITIATIVES

- Date with a leader: Date with a leader is a AWC initiative that allows the attendees to participate in an intimate session with selected leaders in the actuarial industry. The event affords the attendees the opportunity to attend a special group mentoring session with the leader for the particular event, by spending time with them and being able to ask specific questions in order to gain deeper insight into their perspective and experiences. Each Date with a leader is limited to a maximum of eight participants.
- One-on-one Mentoring network: This initiative connects females in the industry who are looking for female mentors to guide and support them in their career journey. We also provide some ongoing support to the mentors and mentees on how to get the most out of their mentoring relationship.
- Masterclasses / Dames of the Round table: These sessions typically cover topics that are relevant to female actuarial professionals and aim to support them in their development in the workplace, in challenges they may encounter both professionally and personally, and to assist them in breaking barriers that they face.

EVENTS

PURPOSE

- To provide a forum in which aspiring female actuaries can network and identify sponsors.
- Responsibilities include:
- Central point of communication and liaison with the ASABA My Planner team to organise events.
 - Supporting other sub-committees in planning in person events.

INITIATIVES

- Annual breakfast: The Annual breakfast is the AWC’s annual flagship event and is meant to connect females across the actuarial profession.
- Networking events: Networking events are aimed at creating a female empowerment network in the actuarial profession.

LEADERSHIP DEVELOPMENT

PURPOSE

- To drive the development of female actuarial leaders in the industry by:
- Providing a platform for the transfer of knowledge and skills to female actuaries in South Africa.
 - Ensuring young female actuarial leaders have a network of professionals to support and assist them.
 - Increasing the number of females involved in actuarial professional bodies (ASSA, ASSA council, etc.) and industry initiatives (committees and working groups).

INITIATIVES

- AWC Leadership Development Program: This is a 12-month program covering various topics related to leadership presented by a diverse group of industry professionals.

RESEARCH DEVELOPMENT

PURPOSE

- To increase the number of females undertaking actuarial research.

INITIATIVES

As this is a new sub-committee, the initiatives are still being developed.

AWC EXCO

WHAT DO WE DO?



CHAIR OF THE AWC FOR 2023 AND 2024:
Idelia Hoberg
(EY, Partner – Africa Actuarial Leader)



SECRETARY GENERAL:
Celeste Rajool
(EY, Actuarial Manager)

HEAD OF OUTREACH: **Pheladi Letsoalo** (Old Mutual Insure, Channel Profitability Senior Analyst)

HEAD OF EDUCATION: **Carien Swanepoel** (Deloitte, Actuarial Assistant Manager)

HEAD OF MENTORSHIP: **Cindy Mackay** (Old Mutual, Executive Associate to the Old Mutual Limited CRO)

HEAD OF EVENTS: **Savannah Reay** (PWC, Actuarial Manager)

HEAD OF LEADERSHIP DEVELOPMENT:
Jodi Christensen (Deloitte, Actuarial Assistant Manager)

HEAD OF BRANDING AND SOCIAL MEDIA:
Isa van Zyl (Deloitte UK, Banking Consultant in the Actuarial Insurance & Banking team)

HEAD OF COMMUNICATIONS: **Lufuno Netshitenzhe** (EY, Actuarial Associate Director)

OUTREACH SUB-COMMITTEE MEMBERS:

Chichi Muyoba (Deloitte, Actuarial Assistant Manager),
Olivia Vryenhoek (Liberty, Actuarial Analyst),
Lesego Taukobong (GenRe, Actuarial Analyst),
Lestrinah Makua (Hollard, Actuarial Analyst)

EDUCATION SUB-COMMITTEE MEMBERS:

Ayesha Camroodien (LibFin, ALM Specialist), Nabeelah Sedat (Deloitte, Actuarial Analyst)

MENTORSHIP SUB-COMMITTEE MEMBERS:

Elizabeth Mogale (Liberty, Specialise Actuarial Analyst)

EVENTS SUB-COMMITTEE MEMBERS:

Phumla Tsematse (Insight, Actuarial Consultant), **Nadine Shaikjee** (Guardrisk, Actuarial Specialist)

LEADERSHIP DEVELOPMENT SUB-COMMITTEE MEMBERS:

Nida Ibrahim (Deloitte, Actuarial Senior Manager), **Micaela De Freitas** (Vitality Global, Actuary)

HOW CAN YOU GET INVOLVED?

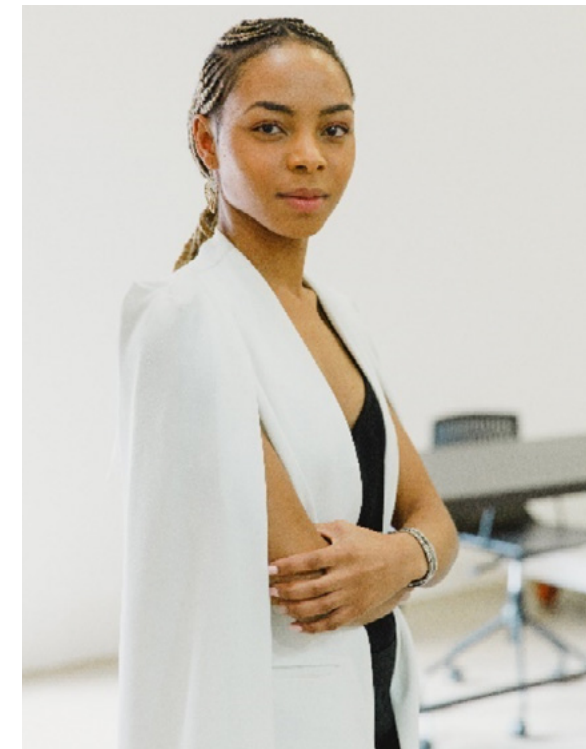
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PABALLO MAKUPU

GETTING TO KNOW YOUR STUDENT REP PABALLO MAKUPU

By Katleho Paballo Makupu

I often get asked why do I do the things I do? And what makes me stand out compared to the next person? Nelson Henderson once said that: 'the true meaning of life is to plant trees under whose shade you do not expect to sit'. It is a powerful quote for me as these words underlie the answer to both questions above.

For those that do not know me, I will go back a few years and provide you with context regarding these questions. I have truly been honoured to sit on the ASSA council for the past 2 years as your student representative. I have served on the AWC for many years as women empowerment and transformation are at the core of who I am. I sit on the STIC committee. Would love to be more active on the AWF. I sit on the Insurance Institute of Gauteng council. And I am not sure whether my day job is in addition to all these volunteer roles but am certain that my role and my organization are what enables me to be of service to our profession and industry.

I grew up in Kroonstad, a small town in the Free State, and it is encouraging, yet concerning, that all of the actuaries that I know from my hometown are in my age group. Encouraging to know as this highlights the efforts of the member engagement board. Concerning in that despite this close knit profession, we lack the engagement and

networks in the different age groups that are going to define the future actuaries.

I have been truly honoured to have had many mentors, managers, advocates and sponsors throughout my career. And this is probably my first nugget to students. Never underestimate the power and influence that a mentor can have on your life and career. You either work hard and get noticed, or you work hard building your expertise as well as your brand. And how do you build this brand? Firstly, you need to consistently produce quality work. Secondly, you need to put up your hand and get involved in initiatives that will showcase your skillsets. Thirdly, if all else fails, approach someone (or many people given that you should have more than one mentor as each mentor brings something different to your journey).

The future actuary is someone that shows up as their whole selves to work.

Finding the true meaning of life is closely aligned to the efforts you put into improving the lives and experiences of others

My road to qualification may have taken the scenic route (i.e. longer than what I expected), but it has been a worthwhile journey. As mentioned earlier, 'the true meaning of life is to plant trees under whose shade you do not expect to sit'. How I have done this is through my involvement in ASABA, AWC and ASSA. Mentorship is at the heart of what I do, and I was honoured to be awarded the ASABA mentorship award for 2022. Women empowerment initiatives fuel my purpose and, as such, I published a book on 'breaking the glass ceiling' which was awarded the Gauteng as well as ABSIP Women on Honour awards. I put my heart on my sleeves and opened up to my experiences in my Tedx Talk on 'how we women should stop sabotaging ourselves'.

The future actuary is someone that shows up as their whole selves to work. Our role is so impactful, but given that we often sit in the background, we miss the fact that what we do keep organisations solvent and ultimately ensures that the policyholder liability is met. We gain lifechanging problem solving skills during our undergraduate degree, which many have used to solve various sustainable development goals. As such, my second nugget is this one – bring your whole self to work and use the skills you learn to make an impactful difference in our communities.

My last nugget to young professionals, is to take accountability. The tools are all there (e.g. networking events and seminars) it is up to you to use them. It is up to you to identify the type of person and actuary that you would like to be and hold yourself accountable to the highest standard. And know that accountability is not just on yourself, but on those that have come before you to pave the path that you are currently on.

So, to answer the question 'why do I do the things I do and what makes me standout compared to the next person' is simple: 'Motho ke motho, ka batho'. Finding the true meaning of life is closely aligned to the efforts you put into improving the lives and experiences of others. 🌱

CREATING VALUE BY CO- OPERATING WITH OTHER BUSINESSES

– Application to Banking and Insurance by Iain Allan

Financial businesses can create value by co-operating with other businesses. For example, a bank or insurer might outsource services to a specialist services provider when it could benefit from the provider's greater skills and experience, not to mention lower costs (resulting from its greater economies of scale). Alternatively, a bank or insurer might work with a retailer, offering to its customers financial products that meet their needs.

Despite the potential for significant value creation through partnerships in various forms, the history of co-operative arrangements between businesses shows that sometimes they don't meet expectations or last very long. This article, which is based on the author's experience while working as head of strategy for a large bank, considers principles for successful co-operative arrangements.



IAIN ALLAN
FELLOW OF THE FACULTY OF ACTUARIES (UK)
DEPUTY CHAIR OF THE IAA BANKING VIRTUAL FORUM
MEMBER OF ADVISORY COUNCIL – CLAXON ACTUARIES INTERNATIONAL

CO-OPERATIVE ARRANGEMENTS BETWEEN FIRMS ARE LIKELY TO FALL INTO ONE OF TWO TYPES:

SUPPLIER RELATIONSHIP	JOINT VENTURE
One party contracts to provide products or services to the other party. Financial payments and service standards are agreed in advance and are documented in a legal agreement between the two parties.	The two parties agree on the strategy and business plan of the joint venture business and share its equity capital, either 50:50 or otherwise. The joint venture is supported by a legal agreement between the two parties.



Supplier relationships in theory

Supplier relationships are widely used by banks and insurers to secure the supply of services ranging from IT hardware and software to credit references and office cleaning. On the other hand, banks may have arrangements to offer banking products to customers of retailers, while insurers may have arrangements to offer insurance products to customers of banks or retailers.

In the UK, the widespread outsourcing of services through supplier relationships is recognised by the Financial Conduct Authority (FCA), as can be seen in section 13.9 of its Senior Management Arrangements, Systems and Controls (SYSC), titled Outsourcing, and in its guidance note FG 16/5 Guidance for firms outsourcing to the ‘cloud’ and other third-party IT services.

SYSC 13.9 comments on service level agreements, saying that they should include the identification of qualitative and quantitative performance targets, processes for monitoring and reporting performance and processes for dealing with inadequate performance. FG 16/5 focuses on risks associated with

outsourcing arrangements. It says that firms cannot delegate responsibility for compliance with regulatory requirements to service providers. It emphasises the need to ensure security of data (including compliance with the European Union General Data Protection Regulation). It says that firms should have in place arrangements to ensure the continuity of services in the event of a disruption to the provision of outsourced services. It also discusses the need for termination arrangements and an exit plan, with an obligation on the provider to work with the firm and any alternative provider to ensure a smooth transition.

Supplier relationships in practice

Supplier relationships represent a straightforward way for firms to obtain products and services when they believe that external parties can provide them better and/or more cheaply. Banks and insurers may have many such relationships. In the experience of the author, the key learning is that these relationships rely on the legal agreements and that it is important, at the outset, to consider possible eventualities and to ensure that they are properly covered in the agreement. Established firms normally have specialists with experience in identifying issues and drafting such agreements.

In the experience of the author, the distribution of financial products to customers of an external party through a supplier relationship can be more difficult. There may be two reasons for this. Firstly, the two parties may not share a commitment to creating value through the relationship. Secondly, if business volumes are greater or less than expected, there will be a financial winner and a loser: the loser may lose interest in the relationship and the winner may be reluctant to re-negotiate the financial terms in the legal agreement.



There needs to be a governance framework that enables both parties to look after their own interests while co-operating with the other party

Joint ventures in theory

Joint ventures offer three clear advantages over supplier relationships. Firstly, because the two parties share ownership of the joint venture business, they have a common interest in creating value through it. Secondly, because the two parties must agree, or at least approve, the strategy and business plan for the joint venture business, they are likely to be willing to discuss and resolve issues that arise rather than resort to the underlying legal agreement. Thirdly, in the event that the joint venture has to be terminated, for whatever reason, one party can have first right to buy the other party’s share at market value as defined in the legal agreement.

However, joint ventures can take a lot of time and effort. There needs to be agreement on the strategy and business plan at the outset and annually thereafter. There needs to be the selection of managers of the joint venture business that are acceptable to both parties. There needs to be a governance framework that enables both parties to look after their own interests while co-operating with the other party in the joint venture business. In the event of problems in the joint venture business, there may have to be discussions between the two chief executives or other senior executives. For reasons such as these, joint ventures may only make sense if the joint venture business is expected to be material to both parties. Firms are not likely to have the resources for many joint ventures at the same time.

Joint ventures in practice

While working as head of strategy for a large bank, the author was actively involved in partnerships and joint ventures with other banks in Europe, the United States and China and with insurers, a credit card monoline and a large retailer in the UK. The following guidelines for joint ventures are based on the author’s experience.

1 In the experience of the author, the initial meeting between representatives of the two parties was extremely important in setting the tone for the intended joint venture. The author favoured an informal one-to-one meeting aimed at establishing common interests and building mutual trust. In such an initial discussion, it is helpful if each party can be open about its objectives and concerns, to ensure that expectations are broadly aligned and to identify any differences and see if they can be resolved. Also, while the focus should be on building a jointly owned business, it is helpful to have an initial discussion about termination arrangements (however unlikely termination is seen to be). The initial discussion may lead to a set of principles for the intended joint venture in simple (non-legal) language. The principles can then be reviewed by each party.

2 If both parties wish to take matters further, a logical next step is for a business and financial plan to be prepared by the two parties working together. The author’s experience led to two main principles for this

phase in creating a joint venture business. Firstly, the work should be done by a small team, probably comprised of two or three employees from each party, of which at least one from each party should have a good internal network of contacts and be able to get information and support as required. Secondly, the work should be completed within a reasonably short period, so that momentum is not lost. This implies that the members of the team should be working full-time on the plan, and not distracted by other day-to-day responsibilities.

3 In parallel with the business and financial plan, consideration should be given to the content of a legal agreement between the two parties covering matters such as ownership percentages, governance arrangements and termination agreements, and commitments to be made by each party to support the joint venture. In the case of a joint venture between a bank and a retailer, the bank might commit to providing products and IT resources, the retailer to providing marketing material and access to data (in a way that complies with data protection regulation).

4 Ownership percentages could be 50:50 (or 51:49, to avoid the possibility of deadlock) or could be quite different from each other (for example, if two parties form a joint venture to manage merged subsidiary businesses of different sizes). Whatever the percentages, the principle should be that each party will seek to understand and respect the interests of the other party. However, if the ownership percentages are far from 50:50, the existence of a dominant partner should be accepted and allowed for in the governance arrangements.

5 When completed (preferably within a relatively short period), the jointly agreed business and financial plan should be presented for approval to the management committee and board of each party, around the same time, probably by the senior member of its employees in the joint project team. If both parties are positive, the legal agreement supporting the joint venture should be signed by both parties, again around the same time.

6 Experience suggests that the joint venture should have its own board, responsible for delivering the agreed business and financial plan, and that board members should come from both parties, according to the nature and needs of the joint venture business. For example, in the case of a joint venture between a

bank and a retailer, the bank's representatives should include people with expertise in banking products and processes and IT systems, while the retailer's representatives should include people with expertise in customer-facing activities (likely to be increasingly online) and data management. These people can ensure that the two parties are delivering on their commitment to support the joint venture and can call for help if required.

7 A key issue is the selection of the CEO of the joint venture business. This person should be selected by the joint venture board and approved by both parties. For a joint venture between a bank and a retailer, it is likely that the CEO will come from the bank. However, the person, while reporting to the joint venture board, should understand the interests of both parties, and be able to command their support to deliver the joint venture plan.

8 In the author's experience of joint ventures, in the event of problems arising, resorting to the legal agreement was regarded as an unwelcome final step, to be taken only if other actions had failed, and likely to be followed by termination. Governance arrangements provided for steps to discuss and hopefully resolve problems before resorting to legal action. In one case, if problems could not be resolved by the joint venture board, they were to be escalated to the CEOs of the two parties (something that no one wanted to happen). In another case, the heads of strategy of the two parties had established a good relationship with each other, and any problems were passed to them for discussion and resolution. In the author's experience, most problems could be resolved in a way that was consistent with the principles agreed at the outset, without needing to refer to the legal agreement.

9 Support for joint ventures may wane over time, because of changes in personnel or in the economic or competitive landscape or because of greater focus on wholly-owned businesses than on partly-owned businesses. Experience suggests that, to ensure that the expectations of both parties remain aligned, there is merit in an informal annual meeting, including the joint venture senior management and senior representatives from both parties, to review progress made over the last year and plans for the next year, and to discuss the implications of economic or competitor developments. Such a meeting should have no decision-taking powers, and any views emerging from it should be conveyed to the chair of the joint venture board.



A key issue is the selection of the CEO of the joint venture business

10 Although joint ventures may not last very long, they can create significant value. If a joint venture is terminated, one party can gain control of the joint venture business (having benefited from the knowhow and support given by the other party), while the other party can get a capital sum instead of future income. Alternatively, relatively short-term joint ventures can serve as a good way to enter a new market or exit from an existing market. A firm wishing to enter a new market can start with a joint venture, benefit from the knowhow and support of its partner and subsequently have an option to buy the other party's share. Conversely, a firm looking to exit a market may first create value through a consolidation transaction with another party and subsequently sell its stake in the enlarged business to the other party or to a third party. The author was involved in each of these forms of short-term value-creating joint ventures.

Co-operation with fintechs

Open Application Programming Interfaces (APIs) and machine learning techniques are enabling banks and insurers to build large databases and to gain value from the data for the development of products and

processes that meet consumers' needs and for the management of risks such as fraud and cyber risk. In this dynamic new world, recently-established fintechs are contributing to innovation and competition, sometimes by offering services to established banks and insurers and sometimes by competing with them in specific areas.

Can established banks and insurers create value by co-operating with fintechs? If so, should this be done through supplier relationships or joint ventures? If the former, might the fintech's income become too dependent on the bank or insurer, and might this relationship inhibit its ability to provide services to other banks and insurers? Also, how might the legal agreement allow for changed circumstances in future, as technologies, methodologies and regulations continue to evolve? If the latter, how might the governance arrangements allow for the different sizes and cultures of the two parties, and the likely dominance of the joint venture by the bank or insurer? Might the joint venture provide an entry route for the bank or insurer and an exit route for the fintech - and, if so, how might this be reflected in the agreement between the two parties? 

RISE OF THE SHORT- TERM ACTUARY

It is no secret that there are very few black qualified actuaries in South Africa, and the number of black actuaries working in short-term insurance is even less. There are various organisations and initiatives that are in place to address the shortage of black qualified actuaries, including the Association of South African Black Actuarial Professionals (ASABA) and the Actuarial Society of South Africa (ASSA) among others. However, a targeted initiative to address the dearth of short-term insurance actuaries has not been in place until recently.

According to the Insurance Sector Education and Training Authority (INSETA), while there is a good supply of black candidates for marketing, HR, finance and investments, there is a clear lack in the actuarial, reinsurance and technical underwriting categories. Data from ASSA, as at January 2023, suggests SA has 150 Black African Fellow Actuaries, compared to the 1264 White Fellow Actuaries: a more than 800% disparity.

Paving a path for black candidates to become actuaries pursuing exciting careers in non-life insurance needs to start from as early as high school to transform the industry and promote equality in the profession.

This is the view of Ronald Richman, Chief Actuary at Old Mutual Insure, who says it is no secret that a critical shortage of black actuarial professionals in South Africa persists and the time has come to change it for the better.

“Addressing this discrepancy by encouraging diverse candidates to pursue careers in the non-life industry becomes critically important as the demand for actuarial professionals continues to grow. We are already seeing a shift in more organisations relying on actuarial skills to model, predict and interpret data to plan for a future in which increased geo-political, climate and socio-economic risks are the norm,” says Richman.

To level the playing field and to promote the non-life actuarial practice area as an attractive and rewarding career path for black candidates, Old Mutual Insure and ASABA have joined forces.

The partnership aims to improve exam pass rates for the non-life insurance actuarial fellowship exam, reward innovative non-life insurance research, and increase networking opportunities among non-life insurance actuaries and students. These initiatives are open to all actuarial students and professionals in the South African market.

“The partnership will promote inclusivity and the availability of skills in the sector as well as identify, support, inspire, develop, and raise awareness for the next generation of black South African actuaries, deepening the pool of candidates available in the actuarial profession,” says Nabeelah Kolia, President of ASABA.

The partnership is being rolled out with several initiatives focusing on three critical aspects of the career journey. The aim is to promote non-life insurance from the crucial stage in high school where learners start making career and study choices, provide support at university level, and then continue the support as these students grow into working professionals.

Over the last year, two industry update events were hosted with the aim of assisting those writing the short-term insurance subjects by providing them with insight into topical matters currently plaguing the industry. There has also been a masterclass event as well as an event where high school students were hosted at the Old Mutual Insure offices to raise awareness amongst students and create the desire to enter the non-life insurance market. A highlight of the programme is a prize for the best research conducted in the non-life insurance space. For 2022 a R10,000 award was granted to Erin Fisher and Stephen Newland-Nell. The applications for the 2023 award will be opening soon. Another highlight is the annual networking event which provides an opportunity for participants to broaden their networks within the actuarial community.

“We are excited to be partnering with Old Mutual Insure on this initiative. We believe it will allow us to expand on the work we are already doing to make the industry more inclusive and transform the South African actuarial profession in the area of non-life insurance,” concludes Kolia. 

Editor's Note: This article was produced by Old Mutual Insure and ASABA on their joint initiative on developing



Launch of the ASABA/OMI initiative at the first industry update event



Job shadow event held at the Old Mutual Insure offices in Parktown

CURATORSHIP 101

INSIGHTS & LEARNINGS FROM A CURATOR by the Deloitte Curatorship Team

Deloitte, Actuarial Insurance Solutions - Curatorship team: Ashish Desai, Jaco van der Merwe and Nida Ibrahim.

Co-authored by: Jodi Christensen



ASHISH DESAI



JACO VAN DER MERWE



NIDA IBRAHIM



JODI CHRISTENSEN

On 1 August 2022, it was publicly announced that Constantia Insurance Company Limited (“CICL”) had been placed under provisional curatorship, but by then our wheels were already in motion. Six days prior, the High Court had granted an application from the Prudential Authority (“PA”) to appoint a provisional curator, and Ashish Desai took the helm to attempt to right the CICL ship. Even for the simplest of businesses, this is no easy feat, but given the complexity of insurance and the imperfect system of trust that underpins all financial services, the ask of an insurance curator is a mammoth one.

WHAT IS CURATORSHIP?

Curatorship has been defined as a regulatory tool stipulated in Section 54 of the Insurance Act 18 of 2017, which provides a mechanism through which an insurer is afforded the opportunity to get its affairs in order, and thus avoid potential business rescue or liquidation. The aim of curatorship is clear, and that is to remediate the insurer back to a sound position. In most cases, the insurer has become technically insolvent and so this often refers specifically to returning the insurer back to a financially sound position. There are, however, a range of reasons why the PA might opt to go the route of curatorship, such as governance or market conduct concerns, fraud or a business plan which is not seen to be suitable for the insurer.

In summary, the PA would typically appoint a provisional curator where they feel the insurer’s plans, processes or financial position are not in the policyholders’ best interests. An overriding principle that the provisional curator is guided by is to preserve the business and protect the interests of the policyholders.

The decision to appoint a provisional curator is not taken lightly, and the mere hint of a looming curatorship can trigger a market’s sudden - and sometimes irrational - loss of faith in the insurer, leading to policyholder and shareholder panic. As such, there is usually a protracted period during which the insurer is afforded the opportunity to rectify its financial position and/or address the specific concerns raised by the PA. During this period, the PA will normally follow a process of escalating levels of intervention. This might include more regular reporting and engagement with the regulator, the requirement to submit remediation plans, the requirement to recapitalise or restructure a business or demonstrable progress towards addressing governance-related concerns. These are, however, only a few possible examples, and the nature and form of regulatory intervention will be

determined by the specifics of the insurer in question. However, should the insurer fail to address the identified matters to the satisfaction of the regulator, the process to install a provisional curator could then be initiated by the PA.

SO, WHAT TRIGGERED THE CURATORSHIP OF CICL?

The curatorship of CICL was triggered by concerns around financial soundness. CICL’s Solvency Capital Requirement (“SCR”) coverage ratio first dropped below the regulatory minimum of 1 in June 2019, to 0.95. This prompted further scrutiny from the PA who required CICL to move to monthly and, eventually, weekly reporting. During this time CICL attempted to secure a capital injection, and made appeals to numerous investors. However, these did not materialise.

CICL remained insolvent for an extended period, as the PA continued to afford them opportunities to seek capital injections or otherwise remediate their financial position.

In July 2022 – around three years after they initially became statutorily insolvent – the weakness of CICL’s balance sheet was further exposed in dramatic fashion, when their financial position worsened suddenly due to market fluctuations and the write-down of certain assets. This led to a further decrease in their solvency coverage ratios. In fact, at this point, their eligible own funds (or available capital) became negative as liabilities exceeded permissible assets. At this point, they would have required a R240m capital injection to at least meet their Minimum Capital Requirement (“MCR”) and R446m to meet their SCR. CICL made further attempts to raise this capital, but these were unsuccessful. Subsequently, the PA initiated the process of applying for CICL to be placed under curatorship.

This journey is summarised below.

THE BUILD-UP TO CICL'S CURATORSHIP



Note: The above information has been extracted from the Founding Affidavit by the PA – available on the reserve bank's website

HOW WERE WE APPOINTED AS THE CURATORSHIP TEAM?

The PA is closely involved in the selection process and is responsible for initiating the curatorship process. However, they do so by making an application to the High Court as they do not possess the power to appoint a provisional curator. The provisional curator is a court-appointed role, and as part of this process a back-up provisional curator may also be selected.

Once this appointment is made, the PA issues a press statement to make this information public. In the case of Constantia Insurance Company Limited ("CICL") it was announced on 1 August 2022 that the provisional curator would be Ashish Desai (FIA, FASSA) from Deloitte, and the back-up provisional curator would be Gerdus Dixon (CA(SA)), also from Deloitte. While both Ashish and Gerdus are senior individuals at Deloitte and the support of their organisation played an important role in their appointment, curators are appointed in their personal capacity. This means that they can be litigated against in their personal capacity by parties such as shareholders, policyholders and other relevant stakeholders. This is why it is important that curators protect themselves with suitable professional indemnity cover.

It should be noted here that appointment to the role of provisional curator does not necessarily require being an actuary, qualified or otherwise. It does, however, require that the provisional curator be fit and proper, which involves careful consideration of whether the individual possesses the required depth and breadth of skills to undertake the specific curatorship, and, critically, whether they have the support and commitment of a set of specialists to assist in the undertaking. For this reason, the broader skills of the organisation that the curator is part of, or will be supported by, is also considered.

In our case, this included specialists across numerous disciplines including Actuarial, Accounting, Business Restructuring, Forensics, Tax and Legal. Notably, from an actuarial standpoint, it included Jaco van der Merwe (FASSA, FFA) as the lead actuarial advisor to the provisional curator, and Nida Ibrahim (FASSA, CERA) as the supporting actuary. The role of a curator is a particularly demanding one that requires full commitment from the curator, as well as significant commitment from the broader curatorship team. As such, Ashish had to set aside most of his day-to-day responsibilities at Deloitte during the period for which he was curator.

The provisional curator selection process is highly sensitive and confidential. Typically, the PA will approach organisations with the requisite skills and resources to take on the curatorship. Nominations and CVs for both the position of curator as well as of their broader supporting team will be reviewed by the PA as part of the process of selecting and ultimately nominating the provisional curator.

It should be noted that the cost of curatorship is borne by the insurer. The strain of this additional cost is clearly not conducive to improving the financial position of the insurer and as such, on top of heavily discounting our services, it was a role we took on with the real prospect of not being paid for our services. During the curatorship process, all associated costs for additional skills or independent opinions were pre-approved by the PA and communicated on a weekly basis to ensure these were properly managed. Should the entity ultimately be wound up and liquidated, and as is the case with CICL, the curatorship fee creditor is added to the list of other creditors, and enjoys no preferential rank over other creditors. While it remains the choice of the nominated party whether to accept the curatorship appointment as well as the risk of non-payment, we viewed this as a matter of public importance and as a priority for us to assist the industry and affected stakeholders.

SO, WHY WAS THE CURATORSHIP PROVISIONAL?

The first thing to note is that the provisional curator selection process is done on an ex-parte basis, meaning that there is not necessarily explicit acknowledgement or agreement from the insurer's management that a curator should be appointed. This process is followed to ensure that there is no opportunity for information or assets to be tampered with by management prior to the arrival of the curator. The PA had a strong working relationship with CICL's management and it was not a concern in this case. However, for the sake of adherence to the standardised process, the ex-parte process was followed nonetheless.

The result of this process taking place on an ex-parte basis is that the curator can only be installed on a provisional basis, as the insurer has not had an opportunity to counter the arguments made by the PA in its court application. A key implication of the appointment being of a provisional nature is that the court also enforces a stipulated return date which is, typically, three months after the

appointment. Within the period from the appointment to the stipulated return date, the curatorship team are required to perform all investigations that are necessary to draft a comprehensive report covering all their findings and making a recommendation to the courts on whether the curatorship should move from provisional to full and final. This period between appointment and stipulated return date also provides any parties who object to the curatorship an opportunity to prepare arguments to be heard by the courts on the return date. The courts discharge the rule nisi, meaning that the curatorship becomes absolute and moves from provisional to full and final unless cause is shown to the contrary.

WHAT WAS THE CURATORSHIP TEAM EXPECTED TO DO?

Upon our appointment, management of CICL were immediately divested of their management responsibilities and, with immediate effect our task was to assume these responsibilities. Ultimate management authority vested with the provisional curator and while only one name is 'bestowed' the title of provisional curator, it was clear even prior to day 1 that no decisions could or should be made unilaterally.

At the time of granting the provisional curatorship, section 27 sub-section 1 of the Insurance Act, which suspends an insurer's right to write new business, was also enforced due to the dire financial position in which CICL found themselves. Our most immediate responsibility was to ensure that the provisional curatorship, the suspension of new business, and all the critical implications that come with these facts were properly and promptly communicated to all necessary stakeholders prior to the issuance of a public statement on the matter by the PA and the Financial Services Conduct Authority ("FSCA"). Regular communication to all stakeholders was an ongoing responsibility and consideration. Included in this is the requirement to stay in near-constant communication with the PA and with the FSCA, who quickly stepped into the fray making themselves available to assist in navigating the market conduct and policyholder protection issues at play. The desire of stakeholders for immediate answers and outcomes was often at odds with the thoroughness required to make informed decisions and the effort required to draw well-founded conclusions. The magnitude of the impact of our decisions meant that we were required to think and investigate deliberately and cautiously, yet to act with urgency.

Given the suspension of new business and the sudden lack of authority of management, coming in as the provisional curatorship team was a difficult task made all the more difficult by the fact that there is no “user guide” for what a curator is required to do. The broad scope of these responsibilities and the aggravating circumstances under which they were to be fulfilled meant that there was no checklist that could reasonably cover all considerations and actions the provisional curator had to take. Again, the overarching principle we followed in all decisions was to do right by the company’s stakeholders, especially the policyholders and, as such, we were also explicitly required to report to the PA immediately should it become apparent that a liquidation appeared necessary, regardless of the stipulated return date.

SO, WHAT DID THE CURATORSHIP TEAM DO?

Unsurprisingly, stepping into CICL’s offices proved to be tense initially, while we navigated the CICL business landscape and embedded ourselves in the management role. This was exacerbated by the sense of panic that accompanied the announcement: as expected; both CICL staff and CICL’s business partners were anxious to learn what the process would mean for their own outlooks and security. Ultimately, we pushed to work in a unified manner with CICL towards the goal of remediating the firm, the only possibility of which would be through finding a willing, suitable investor(s) to provide a much-needed injection of capital.

Practically, coming in as provisional curator means immediately having to take control of the items on the balance sheet, and particularly the assets and accounts. CICL’s structure was such that they used underwriting management agencies (“UMAs”) and outsourcing arrangements extensively, which complicated this matter. We also immediately required sight and approval of all outflows from the business, including claims. Given that the balance sheet was already distressed, the prohibition on writing new business meant that liquidity became the leading threat to the going concern status of the business.

With all of this in mind, one of our first orders of business was to perform an independent investigation into the solvency position of the firm. The SCR numbers presented by CICL to the PA were draft and unaudited, and if we

could demonstrate an improved solvency position, the PA and FSCA would potentially have considered lifting the license suspension. This calculation was complicated by the complex nature of the business, which included complex product and reinsurance structures and long-tailed business, including a medical malpractice portfolio which required special consideration. To expedite this assessment, we relied on information and supporting work provided by the Head of Actuarial Function (“HAF”) for CICL, who made themselves available throughout the exercise. While our independently reassessed figures unfortunately did not paint a more optimistic picture, it enabled us to establish how quickly CICL might deplete its funds. In the end, the assessment served to underscore the importance and urgency of additional capital sources. As such, finding a suitable investor remained our top priority, while simultaneously trying to stem the hemorrhaging of cash on a daily basis.

While we were performing duties and seeking out potential investors in order to clear a path forward, the market and external stakeholders were reacting to the information at their disposal. This included a sharp drop in the share price of Conduit Capital, the holding company of CICL. UMAs entered discussions with other insurers to move their business, and reinsurers invoked their special cancellation clauses. While we attempted to engage these stakeholders and the market at large as best as we could, it became impossible to manage a “run on the book” and we continued to see significant cancellations and a rapid shrinking of the book. It was around this time that we engaged the South African Insurance Association (“SAIA”) to encourage players in the insurance market to work collaboratively with us and operate in an orderly manner. This involved requesting insurers to register their interest with us, to allow us to facilitate a more orderly disposal of the existing business with cooperation of the UMAs.

Ultimately however, it rapidly became apparent that the challenge of curbing a “run on the books”, managing a liquidity crisis, and keeping UMAs engaged and invested while no new business could be written, would prove insurmountable. As such, the only resolution was to establish a liquidity management committee and recommend that liquidation proceedings for CICL be initiated. We imposed a moratorium on the payment of claims, and this effectively halted all claims-related outflows across the board. We further engaged the necessary legal support to draft an application for liquidation.



It should be noted that throughout this process, we aimed to ensure that we, as the curatorship team, did not prejudice any creditors - as of today, the provisional curator remains a creditor of the business for fees due, with no preferential ranking over other creditors.

WHAT INSIGHTS HAVE WE GAINED AND WHAT LEARNINGS CAN WE SHARE?

Immense pressure is placed on the curator as there are constantly conflicting demands on the resources of the business. The curator needs to synthesise large amounts of information and make decisions that they can stand behind. Strength of conviction is a requirement of the role.

It has been stressed before, but the demands of the role dictate that the individual taking on a curatorship role needs to be fit and proper, possessing the correct depth and breadth of knowledge and business acumen to pursue the undertaking. In addition, they need to have access to a committed team possessing the required specialist skills and expertise to provide the support to the curator, as decisions should not be made unilaterally.

The broad scope of the curator’s responsibilities and the stressful circumstances under which they are to be fulfilled means that there is no checklist that could reasonably cover all considerations and actions the provisional curator has to take. Seeking guidance, especially from the regulators, is critical to facilitate quick decision-making.

More broadly, as an industry, this may lead some to question the efficacy of our risk based supervisory regime. However, the risks were identified and reported on for some time prior to the application to appoint a curator. Aside from curatorship, which, for various reasons, is a last resort, there are currently inadequate mechanisms available to the PA for it to ensure capital raising is executed or to effect changes to balance sheet structures, governance structures or business plans of insurers. Perhaps what this highlights is not a failure within our solvency measurement regime, but a gap within the scope of interventions and enforcements available to the regulator prior to applying for an insurer to be placed into curatorship.

Ultimately, until that question is definitively answered, it is incumbent on us all to sharpen our ability to detect these risks and act with the urgency and integrity needed to avoid these situations in future.

Finally, some parting words

“Acting fairly and in the best interests of all stakeholders is not always clear cut and the provisional curator has to make some tough decisions. With every step we took, we were between a rock and hard place, and the best way to deal with it was to slow down, access the strong technical, legal and regulatory support around me, reflect accordingly and make incremental decisions to help the stakeholders seeking information from me.

The outcome we wanted was to find an investor, and for various reasons it didn’t end up that way. Regardless, for the opportunity to try to make a positive difference, I would do it again, if I could be supported by such a strong team once more.” – Ashish Desai

“We witnessed a business that was selling policies and was cash generative, but the foundation of the business – the balance sheet – was not soundly structured. As markets moved, the value of many assets were irrevocably eroded and the foundation of the business crumbled. It is not necessarily within the power of the HAF or even the regulator to force the hands of management in these decisions and, as such, we should consider as an industry, how we close this gap and create opportunities for earlier intervention.” – Jaco van der Merwe

“Having first-hand knowledge of this process, what it seems to highlight is that as actuaries, we need to fine-tune our business acumen and take in the entire picture. It’s not enough to consider only what is within our scope if we want to ensure we avoid these sorts of issues in future.” – Nida Ibrahim

Disclaimer: all information provided herein which concerns CICL is publicly available. If you would like to read further you are able to find additional information online, including court documents. 



If you’d like to view the recording of the Curatorship sessional hosted by ASSA, please click here.

SOME NOTABLE INSURERS PLACED INTO CURATORSHIP IN RECENT MEMORY

SOUTH UNION REINSURANCE COMPANY LIMITED (previously Zimbabwe Reinsurance Corporation SA Limited) 5 October 2004: final curatorship 30 November 2005: curator submits report to court 30 May 2006: curatorship was extended 2007: Curatorship lifted NEW ERA LIFE COMPANY 7 July 2009: placed under provisional curatorship Hendrik Augustyn and Octavia Matloa were appointed joint provisional curators Resolved through significant state investment RESOLUTION LIFE 29 August 2012: suspended from writing new business 6 September 2012: placed under provisional curatorship	Ashlene Van Der Colff and Gerdus Dixon were appointed joint provisional curators 1 November 2013: Curatorship and suspension lifted Shareholding changed; became part of another insurer SAXUM INSURANCE 8 September 2016: suspended from writing new business 20 October 2016: placed into liquidation, following monitoring and intervention from the regulator BOPHELO LIFE INSURANCE AND NZALO INSURANCE SERVICES April 2018: suspended from writing new business November 2018: placed into provisional curatorship Francois Hugo and Paul Zondagh appointed as representatives of True South Actuaries and Consultants	Feb 2019: placed into liquidation NESTLIFE ASSURANCE CORPORATION (RF) LIMITED 20 October 2020: placed into provisional curatorship Peter Whitey appointed 30 November 2020: placed in full and final curatorship 30 July 2021: placed into liquidation 3SIXTY LIFE LIMITED 1 December 2021: suspended from writing new business 21 December 2021: placed into provisional curatorship Yashoda Ram appointed 30 September 2021: placed into final curatorship Tinashe Mashoko appointed This decision was suspended 21 February 2021: placed into final	curatorship Fagmeedah Peterson-Cook appointed Curatorship process is ongoing CONSTANTIA INSURANCE COMPANY LIMITED 26 July 2022: placed into provisional curatorship Ashish Desai appointed 14 September 2022: placed into liquidation
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BACKWARDS AND IN HIGH HEELS: what makes reinsurance under IFRS 17 so complicated

by Pamela Hellig

Results of the Insight Life Solutions 2022 industry-wide IFRS 17 survey and subsequent discussions with its participants revealed that reinsurance is still a topic steeped in uncertainty for many insurers. The reason for this, in short, is that reinsurance is the Ginger Rogers to insurance's Fred Astaire under IFRS 17: reinsurance does everything insurance does, just backwards... and in high heels.



Backwards because reinsurance movements usually mirror those of their insurance counterparts: reinsurance contracts held are generally assets rather than liabilities; premiums are outflows rather than inflows; the reinsurance risk adjustment represents a transfer of risk away from the insurer rather than towards it; and the loss recovery component is a mechanism for an instant boost to the P&L, offsetting the immediate drop associated with the loss component. All this thinking in reverse requires any insurer (and their models, systems and processes) to keep their wits about them during implementation and reporting.

High heels because of the additional complexities of the reinsurance balance sheet (not seen on the insurance side) that require some fancy footwork to navigate, from reinsurance contract boundaries to subsequent measurement of the reinsurance CSM.

The metaphor held before the June 2020 amendments to the IFRS 17 Standard and, since then, it has only been reinforced. The amendments introduced the concept of the loss-recovery component as an offset to the loss component, forging new links between insurance and reinsurance contracts and groups. It is these links that make the measurement of the loss-recovery component, and hence reinsurance reporting, so complex.



This article touches on some of the elements of the loss-recovery component, and other aspects of reporting for reinsurance contracts held, that make it one of the more complicated aspects of IFRS 17 and the subtleties that insurers should bear in mind when implementing them.

1 REINSURANCE CONTRACT BOUNDARIES, GROUPING AND MEASUREMENT

One of the first reinsurance-related questions insurers need to think about is what constitutes a reinsurance contract boundary and hence which cash flows should be included in its measurement.

The measurement of reinsurance contracts held is similar to that of insurance contracts issued in that cash flows within the boundary of a reinsurance contract held arise from the substantive rights and obligations of the insurer (IFRS17:63).

As a practical application of the above definition, think of a reinsurance treaty's notice period, which allows either party to cancel the contract with, say, three months' notice. Due to the notice period, the contract boundary for this reinsurance contract held will include the reinsurance cash flows relating to the following three months of new business the insurer expects to write over that period. Within an annual period, there would therefore be four separate reinsurance "contracts" held by the insurer.

If contracts issued by the insurer are covered on a risk attaching basis, this would mean all covered insurance contracts written during a particular three-month period would be "attached" to the associated reinsurance contract for the entire insurance policy term. It is these insurance contracts that indirectly determine the cash flows, the profitability and the IFRS 17 grouping of the reinsurance contract in question. Actuarial and accounting systems, therefore, need to keep track of the reinsurance group of each insurance contract written until it is no longer in force.

Another implication is that, at a given valuation date, insurers need to estimate all expected future cash flows within the boundary of a reinsurance contract, including those from underlying insurance contracts expected to be issued in the future. So, if a reinsurance contract with a three-month contract boundary inceptioned on 1 December, the 31 December valuation of the reinsurance contract would not only need to include estimated future cash flows stemming

from insurance contracts written in December, but also those from insurance contracts expected to be written in January and February. The insurer would, therefore, need to establish a suitable methodology to quantify expected new business (e.g. based on sales forecasts or business plans). This introduces operational complexity, misalignment between reinsurance and insurance reporting, and concerns around intellectual property, as sensitive business assumptions around future sales might indirectly now need to be made public.

2 RISK OF NON-PERFORMANCE OF REINSURERS

The measurement of the expected present value of future cash flows of a reinsurance contract includes an adjustment for the risk that the reinsurer may fail to satisfy its obligations under the reinsurance contract held (IFRS17:63).

This is an additional calculation – one without an equivalent in the measurement of insurance contracts issued – for which the insurer needs to set an appropriate methodology. According to the Insight IFRS 17 survey, South African insurers are generally planning to repurpose the reinsurance recoverables haircut required by SAM – or some variation thereof based on the reinsurer's credit rating – to determine the adjustment required. The insurer may need to consider whether any modifications to the SAM calculation are required and ensure that changes in credit assumptions are accounted for appropriately.

3 CHANGES IN FULFILMENT CASH FLOWS RELATED TO FUTURE SERVICE

The June 2020 amendments made provision for the establishment of a loss-recovery component at initial recognition to offset the loss component. The loss-recovery component reduces the reinsurance CSM calculation, increases profit and is relatively straightforward to calculate as the product of:

- a) the loss recognised on the underlying insurance contracts; and
- b) the percentage of claims on the underlying insurance contracts the entity expects to recover from the group of reinsurance contracts held.

(IFRS17:B119D)

But what happens at subsequent measurement? How do changes in reinsurance fulfilment cash flows adjust the reinsurance CSM and loss-recovery component?

At subsequent measurement, insurers will need to measure the CSM of each reinsurance group based on the guidelines in paragraph 66 of the standard. Paragraph 66(c) says that the CSM must be adjusted for:

changes in the fulfilment cash flows...to the extent that the change relates to future service, unless:

i) the change results from a change in fulfilment cash flows allocated to a group of underlying insurance contracts that does not adjust the contractual service margin for the group of underlying insurance contracts...

This means that the reinsurance CSM adjustment is based on what happens in the underlying insurance group(s). If the underlying insurance contracts are in a profitable insurance group and hence have a CSM, the change in reinsurance fulfilment cash flows adjusts the reinsurance CSM. If the underlying insurance contracts are in an onerous insurance group and hence have a loss component, the change in reinsurance fulfilment cash flows adjusts the loss-recovery component as per paragraph B119F:

After an entity has established a loss-recovery component..., the entity shall adjust the loss-recovery component to reflect changes in the loss component of an onerous group of underlying insurance contracts...

If the underlying insurance group moves from a profitable position to a loss-making position, or vice versa, the insurer will need to find a sensible way to split the change in reinsurance fulfilment cash flows between the reinsurance CSM and loss-recovery component.

4 THE GRAND FINALE: PARAGRAPH B119F

B119F is the last paragraph in the IFRS 17 standard pertaining to the measurement of reinsurance contracts. It alludes to the reversal of the loss-recovery component – an item which adjusts the reinsurance CSM and the P&L – specifying that it should reflect changes in the loss component of an onerous group of underlying insurance contracts, but is not prescriptive about how the reversal should be calculated. This means that insurers will need to formulate an appropriate methodology to do so.



It also says that the carrying amount of the loss-recovery component shall not exceed the portion of the carrying amount of the loss component of the onerous group of underlying insurance contracts that the entity expects to recover from the group of reinsurance contracts held. It is not obvious how the aforementioned "portion of the loss component" should be calculated, seeing as the loss component of an insurance group is not measured separately per related reinsurance group or for reinsured versus non-reinsurance cash flows. Insurers will need to come up with a pragmatic way to determine the portion of the loss component expected to be recovered to enable them to perform the test required. ⚠️

The issues outlined in this article are just some of the considerations that would apply even to those insurers with very straightforward reinsurance arrangements. It can be easy to slip up when dealing with a reinsurance structure that has many to many relationships between insurance and reinsurance groups. We have found, however, that by working through the IFRS 17 paragraphs one at a time, the challenges are not insurmountable. It is, therefore, worthwhile for every insurer to look in the mirror, don their highest heels, and choreograph the methodology, modelling and systems impacts introduced by the IFRS 17 reinsurance requirements, step by step.

EXPANDING GLOBALLY:

MICHAEL TICHAREVA

Showcasing Banking Expertise to Actuarial Societies in the Americas

by Ronald Kozlowski



RONALD KOZLOWSKI
CASUALTY ACTUARIAL SOCIETY (CAS)
INTERNATIONAL AMBASSADOR

In early December 2022, while attending the 32nd Caribbean Actuarial Association (CAA) Conference in Barbados, I met Michael Tichareva of South Africa's Claxon Actuaries International and the Actuarial Society of South Africa (ASSA). Michael is also the Chair of the IAA Banking Virtual Forum. It was hard to miss Michael as he presented in three different sessions on actuaries working for banks.

In one of his presentations, Michael used South African banking case studies to highlight professionalism issues that actuaries need to consider in banking. In another presentation he showcased how actuarial professionals are involved in banking around the world, including South Africa, Australia, the United Kingdom and the United States. He touched on the ASSA international banking exam developed jointly with the IFoA, now available to actuarial professionals around the world. This exam is pitched at Fellowship level with a banking principles paper and a banking applications paper that lead to a certificate in banking. In another session on Sovereign Credit Risk, where Michael presented jointly with his ASSA colleague, Idelia Hoberg, he discussed the implications of Sovereign Credit Risk in the banking context and based some of his discussions on a 2021 research paper titled, "Sovereign Risk Spillovers in the Banking Sectors of South America and the Caribbean."

Have you ever heard of the CAA? It covers all the Caribbean islands and has members from the Caribbean, Canada, United States, United Kingdom, France, Netherlands and other countries with links to the Caribbean. Statistics from a few years ago show that the Society has around 283 members. Local members come from Trinidad (76), Jamaica (69), Barbados (43), Bahamas (11), with the rest of the Caribbean contributing 25 members. Areas of CAA member jobs include life (150), pension (100), P&C (35), regulation (10), banking (5) and others (20).

IN ADDITION TO ADDRESSING SOVEREIGN CREDIT RISK AND ACTUARIES IN BANKING, THE CAA CONFERENCE ADDRESSED SOCIAL SECURITY AND PENSION ISSUES, CLIMATE CHANGE, SUSTAINABILITY, IFRS17, COVID19, AND INFLATION.

I first met Michael and Marcus Brosland, Resident Actuary at Colina Insurance Limited in the Bahamas, as we were preparing to provide a three-hour professionalism session. Marcus and I hosted "Professionalism: A Deep Dive on the Code," which was based on the CAA's code of conduct. It included a discussion on how actuaries (from the CAS and Society of Actuaries) get themselves in trouble, according to the Actuarial Board for



Counseling and Discipline (ABCD) 2021 Annual Report. If you have never seen this report, I suggest reading it for your professionalism continuing education credit.

Michael spoke afterwards on professionalism challenges in banking. I was skeptical at first as to whether such a session would provide code of conduct content. Michael tied in some business challenges and decision making that not only provided professionalism issues but also gave some concrete examples of projects that one might work on at a bank.

As I sat through Michael's other sessions on banking, I heard him say that property & casualty (or general insurance) actuaries are naturals for entry into banking. I was skeptical because aren't banks all about investments? Isn't that what life actuaries do? Most P&C actuaries don't even touch investments in their practice.

I have, however, worked on a variety of industries, such as construction, retail, food services, health care, pharmaceuticals, transportation, energy, manufacturing and public entities on risks, including property and liability risks. That knowledge of risk diversity and understanding how to deal with them enables P&C actuaries to work for corporate clients as well as insurers. Knowing the depth and breadth of risks helps me understand many industries.

One concept I learnt from my catastrophe modeling days was that of contagion risks, where multiple risks can have losses at the same time. In that same realm, banks are exposed to many risks, including credit, market, and operational risks, that they need to look at on an individual basis as well as in the aggregate. This scenario is a natural fit for actuaries as risk management professionals. Michael indicated that actuaries already have risk management and modelling skills relevant to banking, and they only need to understand banks' business models, products, markets, and regulations to understand the underlying risks that an actuary needs to model in assisting banks in the management of those risks.

I was so impressed with Michael's pitch for actuaries to move into banking that I asked him to present at the 2023 CAS Spring Meeting in Boston, scheduled for May 7-10. Michael's talk resonates with a few initiatives that

the CAS is pushing, the first of which is having actuaries work in different industries. Today actuaries work at companies like Tesla, Apple, Airbnb, Expedia, Hertz and Hotels.com. In fact, CAS President-Elect Frank Chang works for Uber. Second is that we want actuaries to be sought out as problem solvers. CAS members are recognized as experts in risk and risk measurement, so it's natural to have actuaries solving insurance issues migrate to solving other risk issues.

If you don't know of the CAS, we are the largest actuarial association exclusively devoted to P&C issues. Our members start studying P&C risks and risk management earlier than any other exam system. This gives our members more P&C expertise when they complete their Fellowships. The CAS hosts five large seminars each year: Ratemaking, Product, and Modeling in March; Spring Meeting in May; Reinsurance in June; Casualty Loss Reserve Seminar in September; and Annual Meeting in November. In addition to those events, we host webinars and workshops throughout the year.

Michael's banking presentation will be one of 45 or more sessions covering topics such as actuarial toolkits, bias training, catastrophes, cyber risk, economic outlook, emerging issues, enterprise risk management, climate change, sustainability, insurtech, international issues, line of business, predictive analytics and professionalism.

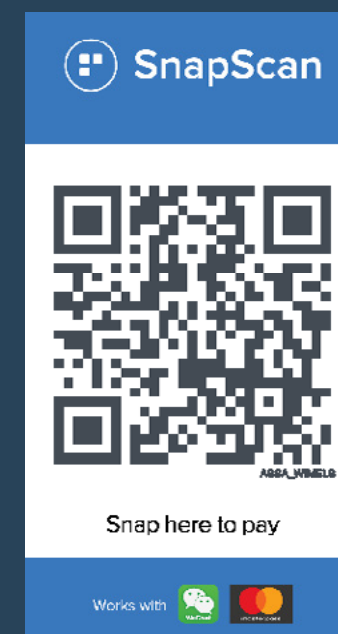
As a CAS International Ambassador, I get to attend conferences around the globe. I find it fascinating to learn how things are so similar yet so different. Consider speaking or attending in a different country, learning about new risks and regional differences. Maybe you'll find a new practice area or make a new friend in another country! 



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