South Africa: Insurance industry update

February 2025



David Kirk, FASSA Adél Drew, FIA Gaël Neuhaus Cameron Hollaway Kerwyn Pillay

Introduction

In this issue of the industry update, we reassess the Solvency Assessment and Management (SAM) prescribed equity shocks following recent findings of a white paper published by our colleagues. We look into building climate resilience in South Africa's non-life insurance industry, highlight the regulatory approval required prior to raising intra-group loans as well as touch on parametric insurance.

If you want to receive our Industry Update and other relevant publications regularly, please send a request to africa@milliman.com.

Reassessing SAM equity shocks: Is the current calibration still fit for purpose?

In a recent white paper, our colleagues revisited whether the SAM framework's prescribed equity shock levels accurately capture the risks South African insurers face today.

With more than a decade of additional market data since the initial calibration, the paper reflects on whether recent trends in global, South African, and certain emerging markets warrant a recalibration of capital requirements. The objective of the paper is to assist insurers and their Heads of Actuarial Function in meeting both regulatory obligations, e.g., assessing standard formula appropriateness, and practical risk management needs, e.g., calibrating Own Risk and Solvency Assessment (ORSA) scenarios.

Some of the findings of the paper include:

1. Global equity shocks:

- The existing 39% stress prescribed under SAM sits below the more recent empirical 99.5% Value at Risk (VaR) of about 43%.
- Although volatility has declined in the last decade (2010-2023), long-term patterns suggest the prescribed shock might underestimate the true tail risk.

IN THIS UPDATE:

- Reassessing SAM equity shocks: Is the current calibration still fit for purpose?
- Building climate resilience in South Africa's non-life insurance industry
- Intra-group loans have you got your bases covered?
- Parametric insurance: A solution for modern risk management

2. South African equity shocks:

- At 43%, the current shock may be too conservative compared to an updated 99.5% VaR of around 35%.
- Aligning South African equity shocks with global benchmarks (approximately 39%) may be more realistic, though ongoing monitoring of market shifts remains paramount.

3. Emerging markets and "Other Equity":

- The 49% shock appears insufficient for certain emerging market risks, given higher observed drawdowns in the data.
- Future analysis should account for hedge funds, private equity, and commodities before drawing firm conclusions on this category.

4. Correlation parameters:

- Empirical evidence broadly supports the original assumption of 75% tail correlation among global, South African, and other equity classes.
- Advanced methods (e.g., extreme value theory) may further refine these findings.

While global equities may require higher calibrated stresses, South African equities could warrant lower stresses than currently prescribed. Emerging markets data, often grouped under "Other Equity", suggests an insufficient shock, however, further work on other asset types included within this bucket is needed.

By considering these nuanced findings, insurers can enhance their risk assessments, refine ORSA scenarios, and maintain robust capital planning.

Building climate resilience in South Africa's non-life insurance industry

As climate change accelerates, its impacts are becoming increasingly severe and widespread. The recent devastating fires in Los Angeles highlight the immense challenges faced by the insurance sector, with many homes now deemed uninsurable. This situation prompts a re-evaluation of risk management strategies across the globe, including in South Africa's non-life insurance industry.

THE UNINSURABILITY CHALLENGE

Uninsurability occurs when the risk of loss becomes so high that insurance companies cannot offer coverage at an affordable price. This phenomenon is increasingly common in regions prone to natural disasters exacerbated by climate change.

South Africa is experiencing a shift in its risk landscape, with an increase in extreme weather events such as floods, droughts, and hailstorms. The catastrophic floods in Durban in April 2022, being a prime example, were among the most disastrous natural events in KwaZulu-Natal in terms of lives lost, homes and infrastructure destroyed, and economic impact.

These events cause significant property, social, and economic damage, straining the financial resources of insurers. The question arises: Could South African insurers face an uninsurability crisis similar to the one seen in California?

DEVELOPING CLIMATE RESILIENCE

To address the challenges posed by climate change, the South African non-life insurance industry must focus on building climate resilience. This involves adopting proactive measures to reduce vulnerability and enhance the capacity to recover from adverse events. Key strategies include:

- Embracing complexity: Accept that the underlying risk drivers are complex and adopt tools and approaches that address this complexity. Denial or underestimation of these complexities hinders the development of resilient adaptive strategies.
- Considering multiple factors: Climate-related risks must be considered in the context of urban development and other exacerbating factors.
- 3. Use of scenarios to tell stories: Exploring risks through scenarios and narratives helps stakeholders envision possible futures and focus on actionable strategies. This approach can be more effective and less resourceintensive than solely relying on quantitative scenarios.

4. Taking action: The purpose of working through scenarios is to take action. Insurers should ask: Could we have seen this situation coming? What should we monitor to get early indications? What can we do now to improve our performance if a similar scenario occurs? By continuously exploring these narratives and asking, "What should we do now?" insurers can regularly assess their strengths and weaknesses and build resilience.

CONCLUSION

The increasing frequency and severity of climate-induced disasters pose significant challenges to the South African non-life insurance industry. By acknowledging the complexity of these risks and proactively building climate resilience, insurers can better prepare for and potentially mitigate the impacts of future events. Considering the interaction of climatic and non-climatic factors and continuously adapting to new information will be crucial in ensuring the sustainability of the industry and the protection of vulnerable communities.

Intra-group loans – have you got your bases covered?

Intra-group loans (IGLs) are widely used across insurance groups for various purposes, including capital optimisation, liquidity management, and cost benefits through favourable interest rates. However, the necessary regulatory approval for these transactions can often be overlooked, resulting in penalties for the insurer.

The Prudential Authority (PA) has imposed various penalties on insurers for granting IGLs without the required approvals. These approvals arise from the interaction between Section 38 of the Insurance Act and Section 45 of the Companies Act.

Section 38(1)(e) of the Insurance Act mandates that an insurer must seek prior approval from the PA before concluding a transaction contemplated in Section 45 (loans or other financial assistance to directors) of the Companies Act. While Section 45 of the Companies Act deals with loans or other financial assistance to both directors and interrelated companies, the heading only refers to directors and may misguide readers about the inclusion of interrelated company transactions. The interaction between the Insurance Act and Companies Act means that prior approval from the PA is required for any financial assistance extended to interrelated companies, such as IGLs.

NAVIGATING REGULATORY REQUIREMENTS

The requirement to gain approval prior to raising every IGL may seem cumbersome and impractical. However, it is good practice to seek approval for a reasonable range of IGLs, supported by strong governance frameworks.

SOME BENEFITS OF INTRA-GROUP LOANS

- Capital efficiency: IGLs allow insurers to optimise the use of capital within the group, improving overall financial efficiency.
- Liquidity management: Insurers can manage liquidity more effectively, ensuring adequate cash flow across the group.
- Lower borrowing costs: These loans typically come with lower interest rates compared to external financing options.

CONCLUSION

Ensuring that the terms of the IGLs are clear and well-documented is essential for compliance. Strong governance frameworks should be in place to manage these loans effectively and in line with regulatory requirements.

Insurers should check with their compliance departments to ensure that existing and future IGLs are getting the necessary regulatory approvals, avoiding the risk of future penalties.

Parametric insurance: A solution for modern risk management

Parametric insurance is rapidly gaining traction as an innovative risk transfer tool, especially in an era where traditional coverage is becoming harder to secure and where new perils—such as cyber, grid failures, and non-damage business interruptions—are challenging conventional insurance models. Unlike traditional indemnity policies, which rely on time-consuming loss assessment processes, parametric solutions pay out when specific triggers (like wind speed or rainfall levels) are reached. This can expedite the claims process, providing policyholders with liquidity when they need it most.

A particularly compelling application of parametric insurance lies in captive programs. These in-house insurance structures, often used by corporations to manage their risks, can benefit from the rapid settlement and reduced administrative burdens that parametric solutions provide. Instead of grappling with complex claim validations and potential legal disputes, captive managers can rely on verifiable, objective data to confirm whether a trigger has been met. That said, parametric policies inevitably involve some degree of basis risk. The more closely these triggers try to mimic traditional insurance, the more complex they can become, potentially undoing the simplicity that makes parametric coverage so agile in the first place.

Beyond the corporate world, parametric solutions are making inroads across diverse markets. In Africa, satellite-based crop insurance is helping smallholder farmers stabilise their livelihoods in the face of climate volatility, while a regulatory sandbox in South Africa tests innovative parametric products for broader implementation. Currently, the PA may approve (on application) the use of parametric methods under the classification of "business other than insurance business".

Across the globe, regulators continue to refine their approaches to parametric modelling, particularly around solvency calculations and capital requirements, acknowledging that the binary nature of triggers and payouts requires fresh thinking about how to measure and manage risk effectively.

Parametric insurance represents an opportunity to fill critical coverage gaps in traditionally uninsured or underinsured areas. Its capacity for faster payouts and streamlined administration can significantly strengthen organisational resilience, freeing up capital and resources that might otherwise be tied up in lengthy claim disputes.

There will be a continued close watch on any local regulatory developments, as insurers look to add parametric insurance to their offerings and further explore how they can benefit from parametric insurance.

How Milliman can help

- Assessing appropriateness of standard formula
- Managing asset-liability risks
- Evaluating parametric risk products and assisting with applications to the PA
- Dealing with regulatory change and approvals
- Determining or reviewing group capital requirements
- Iterative Risk Margin implementation, review, and applications to the PA
- Climate risk management support, including the development of decision-useful climate scenarios

- Independent views and reviews of Heads of Actuarial Function, ORSAs, policies, first-line actuarial processes, and Section 50 transfers
- Analysing non-life claims volatility and assessing potential for insurer-specific parameters (ISPs) to lower capital, or alignment of International Financial Reporting Standard 17 (IFRS17) risk adjustment, SAM standard formula, and actual claims volatility
- Implementation of tried and tested methods for managing complex and emerging risks
- Conversion of Excel spreadsheets into powerful, cloudbased models with all the features of alternative proprietary software using Milliman Mind

Solutions for a world at risk[™]

Milliman leverages deep expertise, actuarial rigor, and advanced technology to develop solutions for a world at risk. We help clients in the public and private sectors navigate urgent, complex challenges—from extreme weather and market volatility to financial insecurity and rising health costs—so they can meet their business, financial, and social objectives. Our solutions encompass insurance, financial services, healthcare, life sciences, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

milliman.com



CONTACT

David Kirk david.kirk@milliman.com

Adél Drew

adel.drew@milliman.com

Gaël Neuhaus

gael.neuhaus@milliman.com

Cameron Hollaway

cameron.hollaway@milliman.com

Kerwyn Pillay

kerwyn.pillay@milliman.com

© 2025 Milliman, Inc. All Rights Reserved. The materials in this document represent the opinion of the authors and are not representative of the views of Milliman, Inc. Milliman does not certify the information, nor does it guarantee the accuracy and completeness of such information. Use of such information is voluntary and should not be relied upon unless an independent review of its accuracy and completeness has been performed. Materials may not be reproduced without the express consent of Milliman.