South Africa: Insurance industry update

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Introduction

In this edition of our industry update, we explore the tangible business impact of intangible assets like brand, using Phoenix Group's rebranding to Standard Life as a timely case study. We examine the complexities of business line allocations under Solvency II and Solvency Assessment and Management (SAM), the challenges and opportunities presented by International Financial Reporting Standard 17 (IFRS 17) in insurance mergers and acquisitions (M&A) and what the latest Solvency II updates could mean for South Africa. We also discuss a recent case study of converting a typical South African funeral model to Milliman Mind (Mind), review best practices in catastrophe (CAT) risk modelling and analyse the surge in the CAT bond market.

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Brands: Intangibles with tangible benefits?

UK life insurer Phoenix's announcement that it will rebrand as Standard Life from March 2026 is a case study in the importance of brand identity in insurance M&A. The technical mechanics of acquisitions (e.g., valuation, benefits of simple licence consolidation vs. product and system consolidation, IFRS 17 contractual service margin recalculation and accounting choice alignment) dominate actuarial attention during deals. Phoenix's decision highlights how brand strategy can be equally critical for long-term business success.

Phoenix Group acquired Standard Life Assurance in 2018 and later secured the rights to the Standard Life brand in 2021. Despite these developments, Phoenix has continued to operate primarily under its own brand name until now. The company has recently announced a strategic decision to adopt the Standard Life banner, a move it believes will better align with its ambitions for future growth.

Chief Executive Officer Andy Briggs highlighted several factors influencing this change, including the strong market recognition of the Standard Life brand, its established presence in new business sales and the potential for increased operational efficiency by reducing duplication across the organisation. This rebranding marks a significant shift in Phoenix's strategic direction, moving away from Phoenix's original identity as a closed-book consolidator—rising 'from the ashes' of Pearl Group in 2010—toward positioning itself as an active player in pensions and retirement solutions.

The decision reflects broader strategic cycles in brand management following acquisitions. Large groups oscillate between maintaining distinct sub-brands to preserve customer loyalty and market positioning, versus consolidating under a monolithic brand to achieve operational efficiencies and clearer market identity. There are numerous examples of major South African insurers experimenting with sub-brands, with varying degrees of success.

Of course, there are technical actuarial considerations that accompany these brand decisions. Although IFRS 3 requires recognition of acquired brands at fair value and IFRS 17 influences the measurement of associated customer relationships and portfolios, the ongoing strategic value of brand decisions extends beyond standard valuation frameworks. The choice of which brand to retain involves quantifiable customer retention metrics and less tangible considerations around market perception, regulatory relationships and long-term positioning.

Are lines of business allocations always clear and accurate?

Line of business classification under Solvency II or SAM can materially impact solvency capital requirements, yet the choice is sometimes less clear than many realise.

European pet insurers illustrate this challenge well: UK and German insurers typically classify pet insurance as miscellaneous financial loss, French insurers often use medical expenses and Swedish insurers report it as property damage. Same underlying risk profile, different capital charges depending on regulatory jurisdiction.

The challenge extends to newer products that do not fit traditional categories. Parametric insurance in South Africa often gets allocated to agricultural classes regardless of actual exposure characteristics. This matters because agricultural business under SAM uses a high premium volatility factor that captures normal volatility and large losses in one factor rather than having a separate CAT module. For parametric products with known risk distributions from historical index data, this represents a crude approximation that may not reflect the true risk profile.

Beyond mapping issues lies a deeper question: Are standard formula factors appropriate for specific portfolios? The standard formula assumes large, homogeneous portfolios with standard dependencies. Small portfolio sizes, heterogeneous exposure concentrations and different levels of dependence all affect the true 99.5th percentile, particularly for niche or developing products where seemingly harsh volatility factors may still understate actual risk.

Insurers should analyse their own experience and volatility to demonstrate whether standard formula factors are appropriate for their risk profile. Milliman Principal, David Kirk, will be presenting ‘Premium risk, standard error? Challenging the fit of standard formula premium volatility factors’ at the ASSA convention, on 5 November 2025. The presentation will provide some deeper insights into the appropriateness of the fit of the standard formula parameters and how insurers can practically assess this.

Mergers and acquisitions in an IFRS 17 world

As the dust begins to settle on the IFRS 17 transition, insurers around the world are beginning to grapple with a new challenge in the IFRS 17 environment: how to account and value insurance mergers, acquisitions or transfers of businesses.

Firstly, one needs to consider the type of transaction.

- If it is a transfer of underlying policies, then these would typically be accounted for directly under IFRS 17.
- If the acquisition/merger would constitute a business combination, then this will likely be accounted for in line with IFRS 3, applying IFRS 17 to the underlying policies.
- Finally, if it is a business combination under common control, there is no clear guidance under the IFRS standards and treatments can differ.

Then, where IFRS 17 applies, the key principle is that the acquired insurance contracts will be assessed and measured as at the date of acquisition. Practically, this means that the fulfilment cash flows need to be assessed, incorporating any consideration received or paid for the policies. These fulfilment cash flows should be valued at a fair price by the acquirer. This results in two options for each cohort:

- Raising a CSM for the respective policies, which can be run off in line with assumed coverage units
- Immediately recognising the loss on any onerous contracts

The following additional matters should also be considered:

1. **Group vs. solo reporting**: In cases where a subsidiary is acquired, the group and solo reporting may differ. This will typically require reporting dual CSMs, which will likely require significant explanation.
2. **Differences in treatment between existing and acquired business**: A key consideration is how to reconcile the accounting treatment of new business with existing business. Although having similar accounting policies is useful, it may not always be practical. Differences in cohort treatment, coverage units and underlying assumptions will add complexity
3. **Insurance acquisition cash flow assets:** Insurers can also recognise the right to obtain future insurance contracts from renewals or new contracts generated by the acquired insurance contracts
4. **Recognition of goodwill:** When acquiring a business combination, it may be appropriate to recognise goodwill as a part of the acquisition.

The accounting treatment for insurance acquisitions is complex. Each situation will present differently and the impact of different treatments at the time of acquisition needs to be carefully considered.

Solvency II changes: What do the latest updates mean for South Africa?

Solvency II is one step closer to the revised Solvency II framework set for 30 January 2027, following the European Commission's publication of proposed amendments to the Delegated Regulation.

Since South Africa's SAM solvency framework was largely based on Solvency II, should South Africa consider adopting any changes to Solvency II? Last year, we delved into some of

the Solvency II and Solvency UK developments relevant to South Africa,[1] which included:

- Reducing the **risk margin** cost of the capital rate from 6% to 4.75% for Solvency II and to 4% for Solvency UK, as well as introducing a tapering factor to allow for the time dependency of risks
- Solvency II widening the corridor of the **equity shock symmetric adjustment** from +/−10% to +/−13% to enhance the ability of the adjustment to further mitigate procyclical effects
- Solvency II **interest rate risk** recalibration changes addressing concerns of underestimation of interest rate risk

The latest proposed Solvency II changes also include a proposal to:

- Adopt an accrual-based approach for determining **foreseeable dividends** which must be based on formal decisions or already established distribution policies. In our June 2025 Industry Update, we provided some local views on foreseeable dividends.[2]
- **Stress the Ultimate Forward Rate** under the interest rate shock (+/−15 basis points), which will now require re-extrapolation under the interest rate shock.
- Exclude negative equity exposures from **concentration risk**.

For a more comprehensive summary of the latest proposed changes, please see Milliman's brief note.[3]

Milliman Mind case study: Converting a typical South African funeral model to Mind

Milliman South Africa recently published a case study detailing the conversion of a typical South African funeral valuation model from legacy actuarial software to Mind.[4] The case study showcased how Mind can modernise actuarial processes, enhance performance and improve governance without disrupting familiar spreadsheet workflows.

What is Mind?

Mind is a web-based modelling platform designed to streamline and accelerate complex actuarial workflows. Mind converts normal Excel spreadsheets into robust, auditable models, offering the transparency and control of enterprise systems without sacrificing ease of use.

Mind emphasises automation, user experience and cloud-based collaboration, allowing actuarial teams to focus on strategic analysis rather than model maintenance. Key features include automated calculations, streamlined data processing, regulatory reporting support and real-time multi-user collaboration with advanced access controls.

Funeral valuation model conversion

The case study involved converting a funeral valuation model, originally built in proprietary actuarial software, into Mind. This model included per-life monthly projections of premiums, death outgo, lapses, expenses, reinsurance arrangements and discounting via yield curves, as well as duration- and age-based decrements.

The conversion process comprised three phases:

1. **Model conversion:** Aligning the Excel-based logic with Mind's requirements, replacing unsupported VBA code with Mind's extended formulae and grouping tables into 'grids' for calculation and display.
2. **Performance testing and optimisation:** Importing the model into Mind using integrated profiling tools to analyse and optimise calculation speed and applying best practice modelling techniques.
3. **Model reconciliation:** Comparing results between the original and converted models, which surfaced previously hidden errors in the legacy version—often related to cell reference issues and complex conversion steps.

The conversion was completed in approximately five days, requiring minimal changes to the original Excel logic.

Performance and scalability

The study compared run times across three platforms: the legacy actuarial software, Excel (using VBA) and Mind (with high-performance cloud computing).

Although Excel could handle smaller datasets, it struggled with scalability and became impractical for large numbers of lives (capped at around 1 million). Mind's HPC feature enabled efficient runs with up to 5 million model points, with cloud costs ranging from USD0.30 for small runs to USD21.18 for the largest tested run. The legacy platform, running on local servers, lacked cloud scalability and incurred much longer run times for large models.

1. Melmed, S., & Kirk, D. (n.d.). Changes to solvency regulations [pdf presentation]. Actuarial Society of South Africa. https://www.actuarialsociety.org.za/wp-content/uploads/2025/07/2024-LIFE-ASSURANCE-SEMINAR-REGULATORY-DEVELOPMENTS-SUSAN-MELMED-DAVID-KIRK.pdf.

2 Kirk, D., et al. (2025, June 5). South Africa: Insurance Industry Update - June 2025. Milliman. https://za.milliman.com/en-GB/insight/south-africa-insurance-industry-update-june-2025.

3 Broens, J., et al. (2025, August 19). Solvency II review - proposed amendments to the Delegated Regulation. Milliman. https://ie.milliman.com/en-GB/insight/solvency-ii-review-proposed-amendments-delegated-regulation.

4 Halloway, C., et al. (2025, September 18). Converting a typical South African funeral model to Milliman Mind. Milliman. https://www.milliman.com/en/insight/converting-south-african-funeral-model-milliman-mind.

Enterprise features and governance

Mind adds several enterprise-grade features to the modelling environment:

- **Comprehensive audit trails:** Automatic logging of all model changes, supporting governance and transparency.
- **User roles and permissions:** Granular access controls allow better governance over the modelling process.
- **Powerful application programming interface (API) integration:** Allows full automation of model runs, data ETL and integration into broader workflows.
- **Stress testing and analysis of change:** Built-in tools support scenario analysis and stress testing. Additionally, Mind natively supports analysis of change runs, particularly valuable for reporting requirements such as those under IFRS 17.
- **High-performance computing:** Parallel cloud processing unlocks scalability for large datasets.

Conclusion

The conversion process to Mind was straightforward, taking only five days from start to finish with minimal Excel logic changes. Not only did the platform replicate the original model's logic, but it also uncovered calculation errors and improved performance at scale.

The result of the conversion was familiar Excel-based workflows that were backed by enterprise audit capabilities and cloud scalability, outperforming legacy and Excel-VBA performance at a large number of model points.

Managing CAT risk: From geocoding to pricing

For the second instalment of our Milliman webinar series, **Premium Perspectives: Non-life insurance in South Africa**, we were joined by Matt Chamberlain, a principal with our Milliman San-Francisco offices, who presented on Advances and Best Practices in CAT Modelling.

CAT modelling is an indispensable tool for events associated with perils such as flood, hail, wildfire and earthquake. Unlike traditional actuarial models which rely on historical loss data and are suited for high-frequency, low-severity events, CAT models are designed to address low-frequency, high-severity risks where historical data is insufficient to capture the full range of potential losses. This distinction is crucial for insurers seeking to accurately price and manage exposure to catastrophic events.

TYPES OF CAT MODELS

CAT models can be broadly categorised into three types: score models, non-event-based models and event-based models. Score models provide a relative ranking of risk but do not offer a direct link to expected loss, making them more suitable for underwriting decisions than for pricing. Non-event-based models estimate loss based on hazard layers at various return periods, such as the 10-year or 100-year flood depth, but cannot account for correlation across a portfolio. Event-based models, in contrast, simulate thousands of possible catastrophic events, enabling the assessment of correlated losses and the calculation of portfolio metrics such as probable maximum loss.

Geocoding: The foundation of accurate risk assessment

Geocoding is the process of converting addresses into precise latitude and longitude coordinates and is fundamental for any CAT modelling exercise. Best practices include standardising addresses, periodically re-geocoding policies to account for new developments and using the most granular location data available, ideally the actual footprint of the insured structure rather than the centroid of the piece of land. Inaccurate geocoding can lead to substantial mispricing, particularly in high-risk areas or where elevation and proximity to hazard sources can have a significant impact on risk assessment and pricing.

Flood modelling and pricing approaches

Flood risk presents unique challenges due to its sensitivity to both vertical and horizontal location factors. Key geographic variables such as distance to river, relative elevation and local drainage characteristics are instrumental in determining flood exposure. Several approaches are available for pricing flood risk:

- **Live rating:** Directly querying CAT models for each location to generate premiums.
- **Grid-based rating:** Establishing base rates for small geographic grid cells, with adjustments for specific property attributes.
- **Factor-based rating:** Using variables derived from a Geographic Information System (GIS) to set rates, informed by physical risk drivers.

Model validation is essential where local conditions and climate change can alter risk profiles over time. Integrating climate projections into CAT models enables insurers to anticipate shifts in peril prevalence and severity, supporting more resilient pricing and portfolio management.

Hail and wildfire modelling

Hail risk, although less sensitive to precise location than flood, still benefits from robust CAT modelling and blending historical data for frequent events. Wildfire risk is increasingly relevant in many regions due to changing climate patterns, with the highest exposures typically found at the wildland–urban interface. As models for these perils mature, insurers should seek to validate outputs against observed data and leverage techniques such as extreme value theory where CAT models are unavailable.

For readers seeking further insights on this topic, a recording of the webinar is available on the Premium Perspectives page of our website.[5]

CAT bond market breaks records in 2025: What is behind the surge?

The CAT bond market has experienced significant growth in 2025, with the market size growing by 15% in just the first half of the year. The CAT bond market reached $55 billion in June 2025, up from $35 billion at the end of 2022. This surge reflects heightened investor confidence and expanding demand for insurance-linked securities (ILS).

CAT bonds are financial instruments used by (re)insurers to transfer risks related to catastrophic events to investors in capital markets. These instruments are used by (re)insurers to reduce their exposure to natural disasters, such as earthquakes, floods or hurricanes. A CAT bond provides a payout on the occurrence of a specified catastrophic event to the (re)insurer or, alternatively, a return to the investors if the event does not occur.

Drivers for (re)insurers

From a (re)insurer perspective, the increase is attributed in part to the impact of climate change in recent years on the frequency and severity of natural disasters. As traditional reinsurance's global capacity is limited, (re)insurers continue to consider alternative risk transfer mechanisms to reduce their gross exposure to CAT claims.

Investor perspective

From an investor perspective, the main driver for the increased market activity in 2025 is due to the resilience of CAT bonds to geopolitical and macroeconomic shocks. This was demonstrated when the pricing of the CAT bond market held firm after American President Donald Trump introduced new tariffs in April this year.

Innovation and diversification

A wider variety of bonds being introduced in recent years, key amongst them being cyber risk, provides even greater diversification for investors and a correspondingly increased demand. Confidence in the market has been cemented by the large role played by the World Bank as well, which has recently facilitated most bonds received by government sponsors.

Implications for (re)insurers

Although the COVID pandemic demonstrated that the market is not impervious to CAT events, CAT bonds continue to serve as an attractive option for portfolio diversification for investors, whilst serving as a competitively priced risk transfer alternative to traditional reinsurance. As climate change intensifies and new risks emerge, it seems unlikely that the demand for CAT bonds will decrease anytime soon. (Re)insurers should consider the potential for increased regulatory scrutiny if utilisation continues to grow, and they should be particularly mindful of basis risk which could be introduced through these instruments.

How Milliman can help

- Analysing non-life claim volatility and assessing potential for insurer-specific parameters (ISPs) to lower capital or alignment of IFRS 17 risk adjustment, SAM standard formula and actual claims volatility
- Modelling of life insurance claim variability to inform reinsurance requirements
- Conversion of Excel spreadsheets into powerful, cloud-based models with all the features of alternative proprietary software using Mind
- Dealing with regulatory change and approvals
- Determining or reviewing group capital requirements
- Due diligence and buy- or sell-side support for M&As
- 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
- Implementation of tried and tested methods for managing complex and emerging risks

5 Milliman South Africa. Premium perspectives: Non-life insurance in South Africa [webinar series]. https://za.milliman.com/en-GB/periodicals/premium-perspectives-non-life-south-africa#sortCriteria=%40m_artdate%20descending.

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