Navigating the regulatory landscape: Solvency II vs. Bermuda Solvency – An actuarial perspective on life insurer

For an actuary working for a globally active insurer, understanding the nuances of different regulatory frameworks is paramount. This article delves into a comparison of the Solvency II and Bermuda regulatory regimes.

Bermuda has established itself as a pivotal centre for global insurance and reinsurance, starting in 1947 when AIG located its international operations on the island, and following the development of captive insurance in the 1960s. The Bermuda Monetary Authority (BMA), formed in 1969, oversees the supervision of financial institutions. Currently, Bermuda is home to more than 1,100 registered insurers and reinsurers, which collectively underwrote gross premiums exceeding $268 billion in 2021 with total assets in excess of $1.1 trillion. Notably, the long-term (re)insurance sector has experienced robust growth in recent years, particularly driven by US life insurers seeking to transfer blocks of business, and supporting the Pension Risk Transfer. Bermuda is also recognised as a leading provider of catastrophe reinsurance to US insurers.

Both Solvency II and the Bermuda Solvency (BSCR framework) are market value and risk-based capital frameworks. The Bermuda framework has received Solvency II equivalence from the EU and UK, and is also recognized as a qualified jurisdiction by the U.S. NAIC, which is an advantage for insurers operating across multiple jurisdictions.

THE BERMUDA FRAMEWORK IS SOLVENCY II EQUIVALENT

Bermuda regulates through a classification system with the purpose to apply lighter regulation to insurers that only cover specific risks, while the most stringent requirements are imposed on large commercial insurers. Under the BMA framework, group supervision is explicitly structured around a Designated Insurer—a lead entity within the group responsible for coordinating regulatory filings and compliance, and supervisory coordination. In contrast, Solvency II applies a more uniform supervisory approach to both individual and group entities, with additional group-specific requirements layered on top.

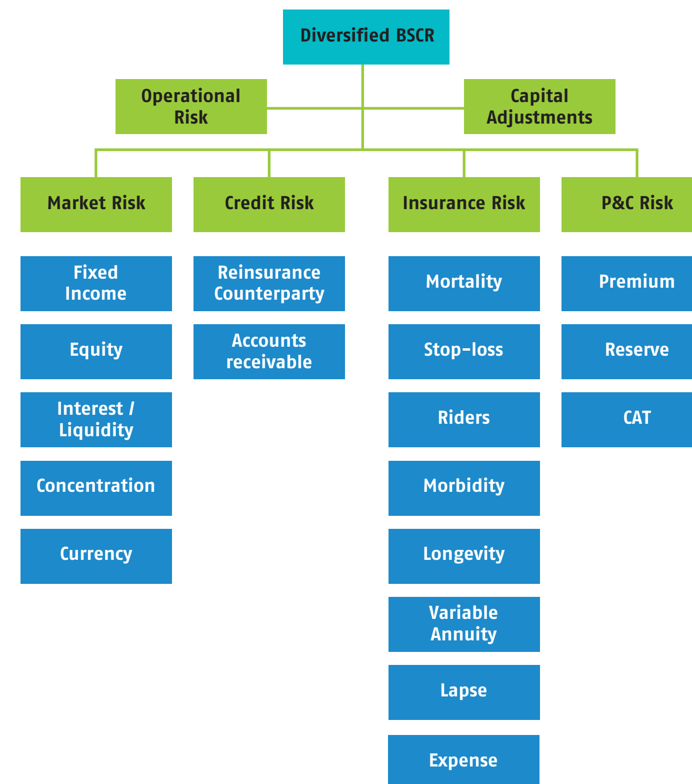
The Bermuda regulatory framework largely aligns with the Three Pillar approach of Solvency II which are discussed next.

Pillar 1 serves as the quantitative backbone of both solvency frameworks. Assets and liabilities are assessed and included on the Economic Balance Sheet (EBS) in Bermuda at fair value in line with GAAP or IFRS principles, or, if GAAP does not require an economic valuation, following the EBS fair value hierarchy.

Bermuda's EBS framework, also defines TP as the sum of the BEL and RM, where RM is equal to the PV of the cost of capital (6%) for non hedgeable risk. For the discounting of BEL there are two options: (1) The Standard Approach uses a BMA prescribed risk free curve + prescribed Illiquidity premium (2) The Scenario Based Approach (SBA), where discounting is based on the yields of the insurer's actual asset portfolio. The standard approach is similar to the volatility adjustment used under SII but applies automatically to all portfolios. The SBA is a key distinction for long-term liabilities, providing greater flexibility compared to the MA under SII, both in terms of asset and liability eligibility.

Rather than applying a fixed illiquidity premium to a risk-free curve, the SBA is using the actual yield curve derived from the insurer's own asset portfolio allowing for reinvestment. This asset-driven discounting is performed across a range of 8 stressed interest rate scenarios, with the BEL set as the maximum asset value required to meet liabilities in any of those scenarios. Notably, there are fewer restrictions on assets allowed to back liabilities under SBA. In addition, liabilities with lapse risk may also be included within the scope of the SBA but the calculation of the SBA then includes additional tests to allow for the lapse risks. Note, where there is no lapse risk and a perfect matching, the SBA and SII MA will be similar. Further, the assets must be investment grade and may include commercial real estate, private credit, mortgages. This wider flexibility in asset strategies allows insurers to boost their investment incomes resulting in higher discount rates under SBA as compared to MA which is limited to traditional fixed income strategies. This flexibility comes with governance requirements in ALM, asset ring-fencing, and enhanced model governance.

Capital requirements under the Bermuda have a similar structure to SII where BSCR can be determined either via a Standard Approach or the Internal Model.



The capital factors used in the BSCR model are calibrated to represent a Tail VaR of 99%, as contrasted to SII 99.5% VaR. Aggregation is similar to the SII SF, with risk types being aggregated using nested correlation matrices. There are differences in some individual risk categories as well as correlation factors applied. For life module, while Solvency II leverages correlations like −0.25 for mortality and longevity, Bermuda's framework incorporates both stronger positive correlations for certain risks and uses more negative correlations (e.g., −0.5 for longevity and mortality). In market risk aggregation, SII provides more granular diversification, whereas Bermuda simplifies risk grouping. At the overall SCR level, SII uses five modules with a more uniform correlation structure, while Bermuda's four-module framework employs a broader correlation range, featuring distinct assumptions such as 0% correlation between Life and P&C risks.

Operational risk is calculated on the diversified BSCR, and therefore does not participate in the diversification; in addition, the charge is based on a qualitative assessment of the strength of corporate governance and (operational) risk management maturity, and can range between 1% and 20%.

Both regimes classify capital into tiers, however, Bermuda may allow more flexibility in recognizing certain instruments, especially for long-term liabilities and group structures.

BOTH REGIMES HAVE SIMILAR REQUIREMENTS FOR ACTUARIAL REVIEW OF THE TECHNICAL PROVISIONS

Pillar 2 of both Solvency II and Bermuda's insurance rules focuses on governance, risk management, and internal controls. Both frameworks require insurers to maintain key functions and follow regulatory guidelines for ORSA and its Bermuda equivalent (ISSA/GSSA). The risk frameworks should address a range of risks, including cyber—where Bermuda has stricter standards. Both regimes have similar requirements for actuarial review of the TPs, but Solvency II uniquely assesses underwriting policy and reinsurance, while Bermuda does not. Further, BMA mandates an independent Group Actuary opinion on the TP which must be submitted to the BMA alongside the YE EBS, where the requirements for the opinion are similar to those for of the SII AFH. The Approved or Group Actuary can also be the actuarial function but must not be involved in the calculation of the TP to maintain independence. Both frameworks require group-level stress testing but may differ in scenarios. Further, the BMA holds broad supervisory powers but doesn't require approval for dividend distributions.

Finally, under **Pillar 3**, both Solvency II and the BMA stress transparency and supervisory reporting, but differ in requirements. Solvency II requires annual public SFCRs and QRTs; Bermuda publishes only the Financial Condition Report and does not mandate QRTs for disclosure or regulatory use. For non-public disclosures, Bermuda requires several filings: the SFR, CSR & Quarterly Financial Returns (QRT equivalents), and GAAP/IFRS-based Group Financial Statements. Bermuda also requires ad hoc cyber event reporting, reflecting attention to operational risks. Solvency II's Regular Supervisory Report (RSR) has no Bermuda equivalent. Overall, the BMA puts emphasis on tailored, risk-sensitive reporting, in contrast to Solvency II's more standardized and prescriptive disclosure regime.

CONCLUSION

The Bermuda framework has SII equivalence status from the EU and UK, and is also recognized as a qualified jurisdiction by the U.S. NAIC. The frameworks share many similarities and both utilise a three-pillar approach. Under Pillar 1, Bermuda's SBA is a key distinction which can provide higher discounting due to allowing more aggressive asset strategies as compared to MA, which is particularly valuable for life insurers long-duration portfolios. For capital tiering, Bermuda may allow more flexibility in recognising certain capital instruments as compared to SII. Bermuda's approach to Pillar 2 and 3 is a lighter-touch risk-based regime which offers some meaningful operational advantages over SII.

As insurers navigate these frameworks, it is essential to recognize that both Solvency II and Bermuda's regulatory regimes continue to evolve—driven by market developments, supervisory priorities, and the pursuit of greater alignment and resilience. ■

D. Babykin MSc AAG FRM is an Actuarial Risk Manager at Aegon Ltd. / Transamerica.

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