Malaysia: Exposure Draft on Risk-Based Capital Framework for Insurers and Takaful Operators (RBC2)

On 28 June 2024, Bank Negara Malaysia (BNM) issued its Exposure Draft (ED) on proposed changes to the Risk-Based Capital (RBC) Framework for Insurers and Takaful Operators in Malaysia (BNM/RH/ED 029-33),[1] commonly referred to as RBC2. This ED takes into consideration the developments in global regulatory capital standards since the introduction of the current RBC framework and aims to achieve greater alignment with the Insurance Capital Standard (ICS) issued by the International Association of Insurance Supervisors (IAIS).

As part of the ED, BNM has asked insurers and takaful operators to conduct a second quantitative impact study (QIS 2) to assess the impact of the proposed new framework on solvency positions. Companies need to provide their QIS 2 response by 31 December 2024. BNM intends to implement the new RBC2 framework from 1 January 2027, with potential parallel reporting commencing as early as the reporting period beginning 1 January 2026.

In this e-Alert, we discuss some of the features of the proposed RBC2 framework and, in particular, how these differ from the current RBC framework. It is not intended to be a comprehensive summary of all the changes being proposed under RBC2, but our view on some of the key highlights.

It will take time to gauge the full implications of all the changes being proposed and to see which ones have the most material impact. However, from our initial review we believe that some of the more fundamental changes appear to be:

- A change to the Malaysian Ringgit (MYR) risk-free yield curve beyond 15 years to allow for extrapolation to a long-term forward rate.
- Removal of the required sterling reserve approach in the calculation of non-unit reserves for investment-linked business.The change to the valuation approach for participating (par) business from the current 'two-peak' approach to a single risk-free valuation that allows for management actions to reduce bonuses.
- A reduction in the minimum supervisory solvency intervention level from 130% to 100%.
- Removal of the surrender value capital charge, to be replaced by an allowance for mass lapse within the lapse risk element of the life insurance/family takaful risk module.
- The introduction of several new capital risk charges such as medical payment risk capital charge, catastrophe risk capital charge and an additional stress applied to inflation within the expense risk. For market risk, there are new capital charges for non-default spread risk and as well as the introduction of a charge for concentration risk.
- Revisions to some of the capital risk charges, including an overall reduction to the life insurance and family takaful risk charges (e.g., mortality and lapse risk charges), higher risk charges for equity and property risks and refinement in the determination of the credit risk and operational risk capital risk charges.
- In the valuation of medical and health insurance/takaful products, the central best estimate liabilities must now account for future claims inflation and can consider the impact of repricing. However, for unit deducting riders to investment-linked policies, only an increase in the cost of insurance charges can be assumed and not the underlying policy premiums.
- The introduction of diversification benefits between different capital charges and between different risk types.
- Positive adjustments to available capital as credit for any negative reserves not recognised due to the fund level flooring of reserves to zero.
- The change in the recognition of the loss absorbency from future non-guaranteed benefits of par business from being an increase to available capital to being a reduction in the required capital.
- Takaful-specific adjustments including a reduction in the recognition of capital available from the Participants' Risk Fund (PRF) from 130% to 100%.

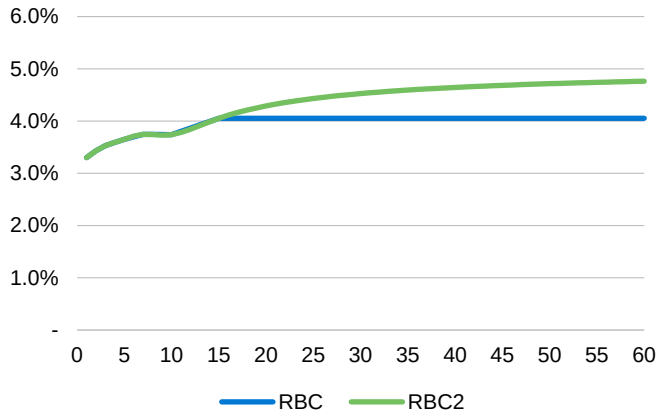
[1] Bank Negara Malaysia (June 2024). Exposure Draft on Risk-Based Capital Framework for Insurers and Takaful Operators. Retrieved from: https://www.bnm.gov.my/-/ed-rcpito

1. Risk-free discount rate

The ED is proposing changes to the long end of the risk-free yield curve used to discount liabilities, moving away from the current approach of using the 15-year Malaysian Government Security (MGS) market spot yield for discounting liabilities beyond 15 years. BNM is now considering the use of a three-segment approach, using MGS yields up to a last liquid point (LLP) of 15 years, then Smith-Wilson extrapolation to a convergence point of the forward rate at 60 years, after which the long-term forward rate (LTFR) of 5% is assumed. The same approach will apply for liabilities of different currencies, with the LLP, convergence point, and LTFR parameters differing by currency. This should bring more stability to the valuation of long-dated liabilities, which in turn will likely result in lower volatility to the balance sheet.

An illustrative example of the change in the discount rate between the current RBC and the proposed RBC2 as at 31 December 2023 is shown below, demonstrating an increase in the risk-free yield beyond 15 years.

EXHIBIT 1: SPOT DISCOUNT RATES UNDER CURRENT RBC AND PROPOSED RBC2 AS AT 31 DECEMBER 2023



Another change to the discounting of the liabilities relates to investment-linked and universal life business. Under the current RBC framework, many companies project unit reserves forward using 'best-estimate' growth rate assumptions and discount non-unit cash flows back using the risk-free curve. Under RBC2, the ED proposes that growth rate assumptions will need to be consistent with the risk-free discount rates, which, in isolation, should lead to an increase in non-unit reserves. However, the separate change in reserving methodology from a sterling reserve approach to gross premium valuation is expected to have greater offsetting impact which will reduce the overall non-unit reserves (described further in Section 2).

In the previous exposure draft on Valuation of Insurance and Takaful liabilities (i.e., Valuation ED issued in December 2019), volatility and matching adjustments were proposed as possible discount rate adjustments that could be applied. However, the industry provided feedback that the expected operational complexities involved in applying the adjustments would be disproportionate to the impact on the valuation of the liabilities. Hence, the ED is proposing for the discount rates to be determined based on risk-free yield curve without any adjustments.

2. Non-unit reserves

Under the current RBC framework there is a requirement that the non-unit reserves for investment-linked products (ILP) are determined by ensuring that all future cash flows can be met without recourse to additional finance or capital support at any future time during the lifetime of the policy. This is interpreted as requiring a sterling reserve approach, whereby the non-unit reserves are calculated by discounting the reserve in the following month after applying a zero floor. This approach can lead to higher reserves than a simple GPV approach that just takes the present value of all future cash flows.

The ED does not make any reference regarding a need to prevent any future financing requirements in the calculation of non-unit reserves, suggesting that the sterling reserve requirement has been removed. As there is also no requirement to floor the non-unit reserves to zero at a policy level, this change could allow for a significant reduction in the total non-unit reserves via offsetting policies with negative non-unit reserves against those with positive non-unit reserves. The aggregate fund-level non-unit reserves will still need to be floored at zero; however, the ED does also introduce a partial (50%) allowance for any negative non-unit reserves lost due to the flooring at a fund level, but as an adjustment to the total capital available (TCA) rather than on the balance sheet itself. This is discussed further in Section 9.

3. Participating business

Under the current RBC framework, the policy liabilities of par (par) funds are taken as the higher of two valuation approaches. The first approach is to value the policies allowing for future non-guaranteed benefits in line with current bonus scales and using a discount rate set equal to a 'best estimate' assumption for future investment returns (i.e., best-estimate valuation peak). The second approach is to include only the guaranteed future benefits and to discount using the risk-free discount rate (guaranteed liabilities peak). The fund-level policy liabilities are then taken as the higher of the aggregate value of these two approaches, across all policies.

The ED proposes to remove this two-peak approach and to instead use a single valuation that allows for future non-guaranteed benefits but using the risk-free discount rate. The future non-guaranteed benefits can allow for management actions, however, to reflect the level of bonuses that would be expected under investment return conditions that follow the risk-free discount rate. Further details on the new loss absorbency mechanism for the par business is described

further in Section 10. In practice, this will likely involve insurers scaling down the level of future assumed bonuses to keep the reserves consistent with asset shares, subject to any restrictions on bonus cuts from the insurers' management of par business policy.

4. Options and guarantees

The ED proposes that the valuation must take into account all options and guarantees embedded in the insurance contracts, and that these must be valued using a stochastic model. However, this is only if they are considered to be insignificant in the context of the overall business valuation or if the results from a deterministic model would not materially differ from those from a stochastic model. There is, though, no indication of what the definitions of 'significant' and 'material' are in this context.

Based on our understanding, in practice, companies currently typically do not use stochastic valuations for any options and guarantees under current RBC reporting. However, if RBC2 is intended to be more consistent with the new Malaysian Financial Reporting Standards 17 (MFRS17), then there could be increased pressure to consider using stochastic valuations for some lines of business with embedded options and guarantees. For MFRS17 we have seen companies calculating a time value of options and guarantees (TVOG), particularly for par business.

5. Solvency intervention

The ED is proposing a new supervisory intervention level at 100% of the total capital requirements (TCR) at an entity level only, which broadly corresponds to a value at risk (VaR) at 99.5% confidence level over a one-year period. This refers to the solvency intervention level below which BNM would intervene on capital adequacy grounds. This, however, does not preclude BNM from setting another solvency intervention level, where appropriate. As a comparison, the Supervisory Target Capital Level under the current RBC is 130%.

6. Components of required capital

The TCR continues to be calibrated under the Standard Formula approach using stress factors prescribed by BNM, with capital charges for:

- Life insurance/family takaful (LIFT) risk
- Market risk
- Credit risk
- Catastrophe risk (new for RBC2)
- Operational risk

The key changes to the existing framework for the components of required capital are summarised below.

REMOVAL OF SURRENDER VALUE CAPITAL CHARGE

Under the current RBC framework, the total capital required is calculated as the higher of the surrender value capital charge (SVCC) and the sum of the credit, market, insurance, and operational risk charges. The SVCC is calculated as any positive difference between the total surrender value of the policies in a fund and the total policy liabilities of the fund. The effect of this is to floor the total risk charges of a fund to be at least equal to any excess of total surrender value over policy liabilities at a fund level. The SVCC component is being removed under the draft RBC2 proposals, to be replaced by the allowance for mass lapse risk charge within the lapse risk element of the LIFT.

LIFE INSURANCE/FAMILY TAKAFUL (LIFT) RISK CAPITAL CHARGES

The key changes to LIFT risk capital charges are outlined below:

- The introduction of a mass lapse risk component to the lapse risk charge
- The introduction of a capital charge for medical payment risk, which is treated separately to morbidity risk. For medical business, the calculation may take into account the impact of repricing of medical business as a management action (see Section 8 for further details)
- The introduction of a stress on inflation within the expense risk charge
- The introduction of a new catastrophe risk charge

Overall, the new proposed stress factors for LIFT capital charges have, if anything, generally reduced, e.g., for mortality and lapses, as can be seen in Exhibit 2 below.

EXHIBIT 2: LIFE INSURANCE AND FAMILY TAKAFUL (LIFT) RISK CAPITAL CHARGE STRESSES

RISK MODULE	CURRENT RBC	DRAFT RBC2
Mortality	±40% where rates are guaranteed. ±20% where rates are not guaranteed.	+25%
Longevity	5-year age setback	-17.5%
Morbidity/ Disability	±45% where rates are guaranteed. ±22.5% where rates are not guaranteed.	+40%
Medical Payments	±45% where rates are guaranteed. ±22.5% where rates are not guaranteed.	+25%
Lapse (Including Mass Lapse)	±50% No mass lapse stress.	Higher of ±45% and mass lapse stress. Mass lapse stress is immediate surrender of 30% of policies (50% for group business).

RISK MODULE	CURRENT RBC	DRAFT RBC2
Expense	+20%	+20% plus an absolute increase of +1% p.a. to expense inflation.
Catastrophe	n/a	Instantaneous 1.5 deaths per 1000 lives. +20% increase in medical payments over the next 12 months.

MARKET RISK CAPITAL CHARGES

The key changes to market risk capital charges are outlined below:

- All market risk capital charges will be calculated as the reduction in net asset value (NAV) after applying the stress factors on the value of assets and liabilities, subject to a floor of zero
- The introduction of new capital charges for non-default spread risk and concentration risk
- There is a significant increase in the proposed risk charge factors for equities from 20% under the current framework to 30%, and for property from 8%/16% (self-occupied/ others) to 25%
- For collective investment schemes (CISs), if a look-through approach is not adopted, a 50% stress will be applied

A summary of the change in the market risk capital charges is shown below.

EXHIBIT 3: MARKET RISK CAPITAL CHARGES

RISK MODULE	CURRENT RBC	DRAFT RBC2
Interest Rate (*)	Y5: +17%/-15% Y10: +30%/-15% Y15+: +30%/-15%	Y5: +35%/-50% Y10: +20%/-40% Y15+: +15%/-35% LTFR: +10%/-10%
Non-default Spread	n/a	+75% in spreads, subject to floor of zero and cap of 150 bps.
EQUITY:		
Listed - Malaysia:	20%	30%
Listed - Developed Markets	20% (G10 country)	35%
Listed - Emerging Markets	30%	50%
Other Equity Exposures	35%	50%
CIS	0% for government securities. 4% for local debt securities. 16% for local equites. 24% for foreign assets.	Apply the specified credit and market stresses to the underlying exposures of the indirect investment (full look-through / mandate-based look-through). 50% (without look-through).
PROPERTY:		
Self-occupied	8%	25%
Others	16%	25%
Currency	8%	8%
Asset Concentration	100% for exposures above investment limit.	Starting from 12% for exposures above prescribed threshold.

(*) Note: Stresses vary by term. We show the stresses for selected terms only. Figures are based on the MYR yield curve as at 31 December 2023, for life insurance only. Stresses are applied to base spot rates, except in the case of the LTFR, which is applied to the LTFR used to extrapolate the yield curve beyond the 15 year term.

Although the market risk charges are calculated at a fund level, the direction of the interest rate risk stress is to be determined based on the direction that results in the highest risk charge at the entity level, the 'dominant scenario.' The interest rate risk charge for each fund will then be calculated based on the dominant scenario, but floored at zero.

CREDIT RISK CAPITAL CHARGE

The capital charge for credit risk is further enhanced in the draft RBC2 to reflect the term to maturity of the risk exposures and the credit rating of the counterparties. As well as varying by credit rating and maturity, the stress factors vary for different entities (e.g., public sector entities, corporates, and reinsurers).[2] In the case of reinsurers, licensed and qualifying reinsurers have stress factors equivalent to those for AAA-rated reinsurers, regardless of their actual rating.

Exhibit 4 shows a very limited selection of the credit risk charges for corporates under the current RBC framework and the draft RBC2 framework.

EXHIBIT 4: SELECTED CREDIT RISK CAPITAL CHARGES FOR CORPORATES

RATING / MATURITY	CURRENT RBC	DRAFT RBC2
AAA / 1 Year	1.60%	0.20%
AAA / 10 Years	1.60%	2.10%
AA / 10 Years	2.80%	2.10%
A / 10 Years	4.00%	3.20%

OPERATIONAL RISK CAPITAL CHARGE

Under the RBC2 proposal, the capital charge for operational risk will be calculated using a factor-based approach applied to gross weighted premiums written in the year-to-date, the reserves as at the valuation date, and the management expenses incurred in the year-to-date. The formula takes the higher of the premium and reserve components (for non-account based products) and adds the expense component (applicable to account-based products). This represents a change to the ‘1% of asset value’ approach that applies under the current RBC framework.

[2] References to reinsurers also includes retakaful operators.

7. Diversification benefits

Unlike the current RBC framework, the ED is proposing explicit allowance for diversification effects. The capital charges for LIFT (excluding catastrophe) and market risks will be aggregated through diversification matrices. The total capital charge for each risk component (LIFT excluding catastrophe, catastrophe, market, and credit) are then aggregated through another diversification matrix, with operational risk added after this diversification.

8. Medical business

Faced with rising healthcare costs and increased consumer demand for medical and health insurance (MHI), many insurers and takaful operators are facing significant challenges in managing their medical business in a sustainable manner. The ED has several new requirements on MHI contracts that provide medical reimbursement benefits, which includes the following:

- Claims inflation must be explicitly accounted for when calculating the liabilities.
- Companies must allow for the impact of repricing as a management action when determining the medical payment risk capital charge, if such management action was considered when calculating the central best estimate liabilities.
- For unit deducting riders attached to investment-linked policies, insurers and takaful operators can only assume an increase in the future cost of insurance (COI) but not an increase in future premiums.

By allowing for a repricing impact to COI charges but not premiums, the projected sustainability of the investment-linked policies with medical riders will reduce significantly (as such, policies will be projected to terminate earlier given the impact of higher COI on the rate of depletion of the unit funds). This effect is accelerated further by the requirement to assume unit fund growth rates equal to risk-free rates. However, we also note that this approach will avoid insurers and takaful operators benefiting from capitalising the future profits from the increase in premiums due to the repricing exercise.

9. Regulatory adjustments to available capital

One of the key changes proposed in the ED is the inclusion of a portion of any negative reserve as a positive regulatory adjustment when determining the TCA at the insurance fund level. The amount of negative reserves to be included in this TCA adjustment will vary by the type of business and is outlined below:

- 100% for par funds and PRF
- 50% for other insurance funds and the shareholders' fund

Negative reserves are, however, allowed at a policy level and the zero floor only applies at an aggregate fund level, so this change will only affect funds where the aggregate unrestricted reserves would be less than zero (and therefore shown as zero in the fund's balance sheet). This could affect ILP operating funds and some non-par funds, but we would not expect any impact on par funds where the aggregate policy liabilities will typically be far in excess of zero.

Par funds are also subject to restrictions on fungibility of capital, such that the amount of capital available in the par fund that is recognised in the TCA is capped at the capital required for the fund. Similar requirements apply for PRFs for takaful business (see Section 11 below). For all other funds, the entire capital available in each fund is recognised in the TCA.

10. New loss absorbency mechanism for par business

Under the current RBC framework, the allowance for loss absorbency from future non-guaranteed benefits of par business is reflected via a positive adjustment to the TCA. The adjustment is equal to 50% of the difference between the par reserves calculated under the best-estimate valuation peak and the reserves determined under the guaranteed benefits peak. This two-peak valuation approach is described in Section 3.

Under the new proposed approach for RBC2, this positive adjustment to the TCA is removed and instead the allowance for loss absorbency will be reflected by allowing for the offsetting impact of reduced future non-guaranteed benefits in the calculation of each risk stress impact. For example, where the equity stress leads to a fall in the par fund assets, the insurer can offset the impact of this on the net assets by recognising a reduction in future non-guaranteed benefits as a result of management actions in response to the fall in asset values.

The proposed approach under the new RBC2 framework will have increased operational requirements for insurers as they will need to recalculate the par fund liabilities under each risk stress and determine how the future non-guaranteed benefits should be adjusted in each case. It should, however, give a more accurate view of the risk capital requirements of each insurer's par business as the 50% factor used in the current RBC framework will not accurately reflect the actual loss absorbency of each individual par fund.

The shift of the allowance for loss absorbency from the available capital, under the current RBC framework, to the capital required, under RBC2, is also likely to have a significant impact on par fund solvency ratios and the sensitivity of those solvency ratios to further stresses. Both the available capital and required capital will become significantly lower under the RBC2 framework, but they may also be less sensitive to further stresses.

The draft RBC2 also proposes that the present value of future shareholder transfers from par business should be included as part of the calculation of the policy liabilities, representing a change to the current RBC standards. This will mean that the only sources of available capital for par funds will be from any negative reserves (which we would not expect to be significant for par business) and the par fund estate. If par funds do not have significant estate, then par fund capital requirements may need to be met from available capital in other funds of the company. However, if there is sufficient loss-absorbing capacity to absorb the impact of each risk through reductions to the future non-guaranteed benefits then there could also be very low capital required for the par fund. It will be interesting to see the results from QIS 2 for par business as there could be quite differing impacts depending on the current position of each insurer's par fund.

More information on loss absorbency in risk-based capital frameworks can be found in our previous e-Alert.

11. Takaful-specific adjustments

For takaful operators, the ED proposes a reduction to the recognition of the TCA in the PRF if the determination of the expense reserve in the shareholders' fund includes the future surplus distributions from the PRF and the company does not have a corresponding reserve for the surplus amount in the PRF.

In addition, the takaful operator must also take into account the impact of reduced future surplus distributions from the PRF to the shareholder funds after applying the specified stresses in determining the capital charges for LIFT, market and credit risks for the shareholders' fund.

Similar to par business, the amount of capital available in the PRF that is recognised in the TCA is capped at the capital required for the fund. In comparison, under the current RBC framework, the amount of capital available in the PRF that is recognised in the TCA is capped at 130% of the total capital required for the fund. Hence the proposed change will likely result in a reduction in the recognition of capital available in the PRF.

12. Conclusions

The proposed changes introduce substantial revisions to the existing RBC framework. In terms of implementation, we foresee several material challenges, particularly around the application of management actions for bonus revision and future surplus distributions.

We anticipate greater clarity will emerge in the next few months as companies embark on the QIS 2 exercise to assess the impact of the proposed RBC2 requirements relative to existing standards.

For further information, please contact the authors of this e-Alert listed below or your usual Milliman consultant.

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