Hong Kong RBC

Proposed Technical Adjustments

ASHK RBC Task Force

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ACTUARIAL SOCIETY of HONG KONG
香港精算學會

Context

ASHK and HKFI jointly offer the proposals contained in this document with the aims of:

- **Making the proposed HK RBC framework more robust;**
- **Making the HK insurance industry more sustainable by promoting strong risk management;**
- **Making Hong Kong an attractive location for MNCs to base themselves;**
- **Making the HK insurance industry more competitive; and**
- **Promoting adequately, but not overly priced long term insurance for the benefit of the Hong Kong public.**

Consultation with HKFI's Life Insurance Members

- Responding companies – 13 (out of a total of 54)
- Overwhelming support received with the following exceptions:

➢ two companies (out of a total of 13) do not support items 1C and 1E

➢ one company does not support items 1A, 1B, 1D and 2A

Roadmap

1. Improvements to the Matching Adjustment

- **A** Redefine the Duration Factor to Align with its Purpose
- **B** Recognise Derivatives in the Duration Factor
- **C** Use Best Estimate Assumptions for the Predictability Factor
- **D** Simplify the Dynamic MA under Market Risk Charges
- **E** Consider Increasing the LTA to 1.5%

2. Align Overly Conservative Aspects with ICS / Solvency II

- **A** Funds on Deposit
- **B** Homogenous Risk Groups
- **C** Define First Call Date Based on Substance, Not Form
- **D** Favourable Treatment for Qualifying Infrastructure Investments

Improvements to the Matching Adjustment

- **Redefine the Duration Factor to Align with its Purpose**

1A

Redefine the Duration Factor to Align with its Purpose

The valuation of long-term liabilities is driven by the discount rate, and in particular the spread in excess of the risk-free rates, referred to as the **Matching Adjustment ("MA")**. We strongly support the MA approach. The MA can be thought of as consisting of two components:

MA = (Fixed Income Component x % Invested in Fixed Income) + (Equity Component x % Invested in Equities)

The Fixed Income Component ("FIC") depends in part on the duration factor:

$$\text{FIC} = \text{Risk- corrected spread} \times \text{Max}\left(0, \text{Min}\left(\text{Eligible asset \%}, \frac{\text{Asset dollar duration}}{\text{Liability dollar duration}}\right)\right) \times \text{Predictability factor}$$

Duration Factor

The intended purpose of the ratio is to apply only an appropriate proportion of illiquidity premium that represents the degree of coverage, by duration, of money which will be invested over the liabilities – so that credit is taken only for the duration of amounts that will be invested. This is done by prudently lowering the proportion that is recognised if the amounts of cash inflows to be invested over the contract term have a shorter duration than the liabilities that are contingent on receipt of those inflows.

However, in QIS 3, only cash flows received from repayments of principal and interest on invested assets is recognised. We proposed to also recognise cash flows received from premium payments. Economically, both are cash inflows. Both will be invested according to the same investment strategy.

Proposed adjustment to duration factor

Recognise future premiums consistently with invested assets within the MA calculation.

How Does the Adjustment Work In Practice?

The premium dollar duration is reallocated from the denominator to the numerator of the duration factor.

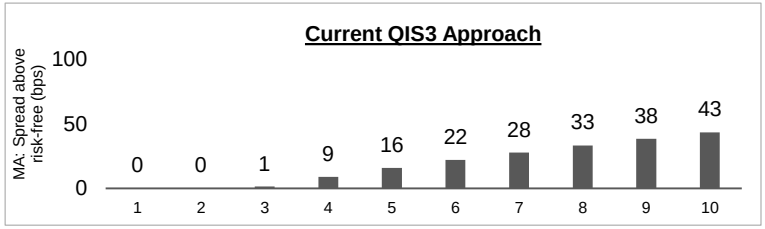
	Base Case	Interest Rate Down
Asset Dollar Duration	90	110
Premium Dollar Duration	120	150
Liability Outflow Dollar Duration	300	600
Liability Dollar Duration *(Liab. Outflow Duration – Premium Dollar Duration)*	180	450
Dollar Duration Gap	90	340
Duration Factor (QIS3) =	$\frac{90}{300 - 120} = 50\%$	$\frac{110}{600 - 150} = 24\%$
Adjusted Duration Factor =	$\frac{90 + 120}{300} = 70\%$	$\frac{110 + 150}{600} = 43\%$

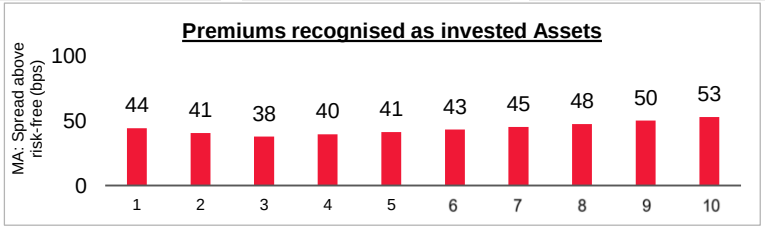
- The goal of the MA is to compare the percentage of outflows that can be covered by inflows, i.e. “cash in vs. cash out”.
- Dollar duration gap does this. Because it is a difference, it doesn’t matter whether premiums are considered positive inflows or negative outflows
- The duration factor, however, is a ratio that is distorted when premiums are not recognised as cash inflows.
- The impact is positive and does not diminish when rates decrease, so is less pro-cyclical
- Of course, this will increase reported available capital and assume current level of spreads will be earned by the future premium cash flows

Negative Impact on New Business

Example: Limited-Pay Whole of Life

	Dur 1	Dur 6	Dur 10	10 yrs of new business
Asset Dollar Duration	0	1.6	3.6	20.7
Premium Dollar Duration	4.8	2.8	1.7	70.5
Liability Outflow Dollar Duration	10.7	10.3	10.0	211.9
Liability Dollar Duration *(Liab. Outflow Duration – Premium Dollar Duration)*	6.0	7.5	8.3	141.5
Dollar Duration Gap	6.0	5.8	4.7	120.7
Duration Factor (QIS3) =	0%	22%	43%	15%
Adjusted Duration Factor =	44%	43%	53%	43%





- The understatement of the ratio is greatest in the early policy durations and dissipates over time.
- Hence the negative impact is most pronounced for companies writing significant amounts of new business.

Precedents

Hong Kong RBC rules recognise premiums as asset cashflows within the MA specifications

Within the **current MA technical specifications**, specifically in the predictability factor calculation, "annual asset cash flows should only include cash flows from the eligible assets, premium received and investment return on excess cash balance". This is inconsistent with how premiums are treated in the duration factor calculation.

ICS and Singapore RBC2 regimes align with the principle of "Cash in" versus "Cash out"

As part of the technical specifications for the **ICS 2020** Field Testing exercise, **premiums are treated as an asset inflow** rather than a liability cashflow in two examples:

- Within the request for additional information for portfolios on the middle bucket, paragraph 137b requires IAIGs to provide the percentage of premiums within asset cashflows: "The percentage of future premium in assets (i.e. the percentage of cash flows that come from premiums) is computed …"
- Within the assessment to determine the proportion of middle bucket eligibility, premiums are considered as an asset inflow separate from liability cashflows (see paragraph 161 of the ICS Technical Specification).

A similar concept is used in the cashflow matching assessment for matching adjustment (MA) eligibility under **Singapore RBC2**, where "excess cashflows from the matching assets over liabilities, and excess premium income can be rolled forward to meet shortfalls in later years".

Consistent with ALM & Liquidity Management industry practices

The **Asset Liability Management** and **Liquidity Management** of many companies treat premiums as asset cashflow in the management of it's duration gap in tight timing bands. In practice, renewal premiums are immediately invested in long-term assets according to the **strategic asset allocation** same as are our coupon payments and repayments of principal..

Summary of Proposed Adjustment to Duration Factor

Proposed adjustment to duration factor

Recognise future premiums consistently with invested assets within the MA calculation.

New Duration Factor definition

$$\text{FIC} = \text{Risk- corrected spread} \times \left(\text{Max}\left(0, \text{Min}\left(\text{Eligible asset \%}, \frac{\text{Cash inflow dollar duration}}{\text{Liability outflow dollar duration}}\right)\right)\right) \times \text{Predictability factor}$$

We believe that this adjustment achieves the intended objective of the duration factor by recognising cash inflows upon which the liabilities are contingent (premiums and charges) consistently with invested assets.

This is in line with standard ALM and liquidity management practices and as a result has the following benefits:

- ✓ Removes the negative impact on companies writing significant new business
- ✓ Reduces procyclicality
- ✓ Is more consistent with the direction of travel of the ICS

Improvements to the MA

- **Recognise Derivatives in the Duration Factor**

1B

Recognise Derivatives in the Duration Factor

When assets are shorter than liabilities, derivatives can be used to lengthen asset duration to produce a closer match. However, the QIS 3 specification do not permit this to be recognised.

- Recognition of the benefit of using derivatives would incentivise prudent management of interest rate risk
- Non-recognition is inconsistent with the economic position
- Non-recognition is inconsistent with the way the Interest Rate Risk charge is calculated, where the benefits of derivatives are recognised in the shock on the asset side.

Proposed adjustment to duration factor

Recognise Derivatives in the Calculation of the Duration Factor.

Improvements to the MA

- **Use Best Estimate Assumptions for the Predictability Factor**

1C

Use BE Assumptions for the Predictability Factor

- The predictability factor measures the cash flow mismatch up to the last liquidity point. The intention is to encourage better ALM and the matching adjustment can only be recognised when there are **NO** forced sales of assets due to cashflow mismatch.
- The predictability factor is defined as:

Predictability Factor = Max (0 , 1 — Accumulated cashflow shortfall %)

Accumulated cashflow shortfall% (ACS%) = Max(ACS%base, ACS%lapse up, ACS%mass lapse)

- We agree with the intention of encouraging better cash flow matching
- However, the approach of shortfall % based on stressed assumptions introduces unnecessary prudence. **For the purpose of obtaining the Best Estimate Liability, we believe best estimate assumptions should be used**. Alternatively a much milder stress could be introduced.
- Allowance to lapse risk should be built into the PCR rather than the discounting framework.

Proposed Technical Adjustment

Remove the excessive prudence from the predictability factor by using best estimate assumptions only. Alternatively a much milder stress could be introduced.

Improvements to the MA

- **Simplify the Dynamic MA under Market Risk Charges**

1D

Simplify the Dynamic MA under Market Risk Charges

We propose not to recalculate the **"Dynamic MA"** application ratio when computing:

- Interest Rate Risk ("IRR")
- Credit Spread Risk ("CSR")
- Equity Risk ("ER")

We propose the following technical adjustment as a way of improving the current approach:

Dynamic MA

Proposed Technical Adjustment

Use the same MA Application Ratio calculated for the economic balance sheet for IRR, CSR and ER.

We believe that this adjustment is technically sound and justifiable based on the following:

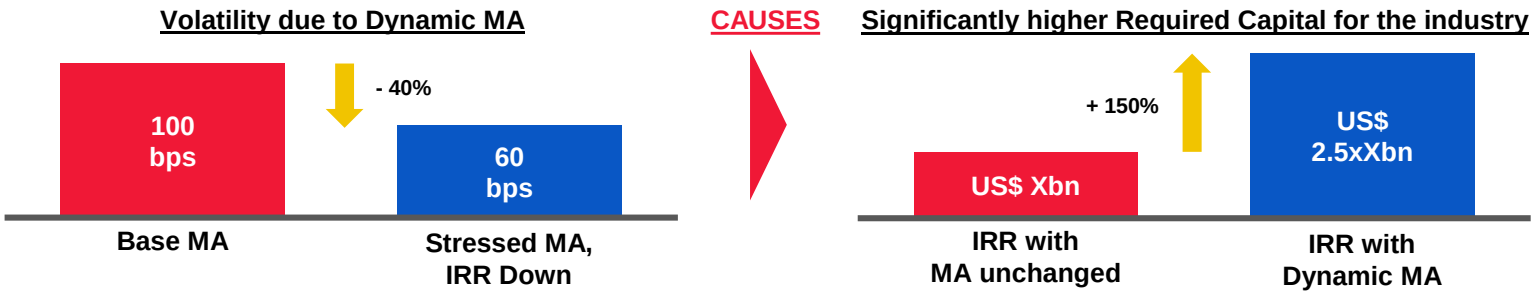
- ✓ Makes the process much less computationally intense
- ✓ Makes the process less pro-cyclical
- ✓ Makes the approach more consistent with other regimes

Each of these is discussed separately below.

Simplify the Dynamic MA in the IRR Charge

Under the QIS3 **"Dynamic MA"** approach, the MA application ratio is recalculated when required capital for interest rate risk is determined. This can reverse much of the benefit of the MA and is therefore highly pro-cyclical.

Following is a conceptual illustration assuming fixed income assets earn a risk-corrected spread of 100 bps and all assets are fixed income.



We propose the following technical adjustment as a way of improving the current approach:

Dynamic MA

Proposed Technical Adjustment

The MA Application Ratio should remain unchanged within the Interest Rate Risk Charge, consistent with other international regimes such as Solvency II and the ICS.

Simplify the Dynamic MA in the IRR Charge

This adjustment is supported by the following:

Re-calculating the Application Ratio is inconsistent with the purpose of the IRR Charge

By definition the purpose of the IRR charge is to assess the impact of changes in (risk-free) interest rates. Changing the spread as well as the interest rate is counter to this purpose because it mixes two types of changes.

Re-calculating the Application Ratio introduces unnecessary high levels of procyclicality

We observe that, under the current HK RBC QIS3 approach, when interest rates fall there is a **compounding effect** of reducing Available Capital and increasing Required Capital, which is amplified in a low interest rate environment.

Recalculating the Application Ratio is inconsistent with other international regimes

Under Solvency 2 when there is a “Dynamic Volatility Adjustment” (S2 version of MA) such as in the Netherlands, the same factor is applied to the shocked interest rates. The same is true under the ICS Middle Bucket.

There is significant operational complexity within the current approach

Re-calculating the Application Ratio entails a significant increase in operational complexity. The burden is especially great for smaller companies

Simplify the Dynamic MA in the CSR Charge

Under QIS3, the MA application ratio is recalculated when required capital for credit spread risk is determined.

We suggest to use the same percentage as for the base balance sheet. This is consistent with our suggestion for interest rate risk.

- For example if the risk corrected spread is 100 bps under the base balance sheet and 300 bps under the CSR shock and the MA application ratio is 50% under the base balance sheet, it should remain 50% under the CSR shock. In this case net spreads of 50 and 150 bps are recognised for the base and shocked scenarios.

We believe that this adjustment is technically sound and justifiable based on the following:

- ✓ This greatly simplifies the process
- ✓ It is counter-cyclical and consistent with the separation of credit risk into spread risk and default risk.
- ✓ It is consistent with the dynamic VA approach used by several jurisdictions in Europe and under consideration by others.
- ✓ It has been a consistent position of the ASHK and HKFI since introduction of HK RBC

Dynamic MA

Proposed Technical Adjustment

The MA Application Ratio should remain unchanged within the Credit Spread Risk Charge, consistent with other international regimes such as Solvency II and the ICS.

Simplify the Dynamic MA in the ER Charge

Under QIS3, the MA application ratio is recalculated when required capital for credit spread risk is determined. This causes an operational burden.

The change in the ratio, if any, in the application ratio comes about because of a potential change in liability duration due to an increase in TVOG, which affects the fixed interest component of the MA.

This is inconsistent with other regimes.

Proposed Technical Adjustment

The MA Application Ratio should remain unchanged within the Equity Risk Charge, consistent with other international regimes such as Solvency II and the ICS.

Improvements to the MA

- **Consider Increasing the Long Term Adjustment (LTA) to 1.5%**

1E

Consider Increasing the LTA up to 1.5%

Hong Kong insurers have significant exposures in equity investment (e.g. listed equities, private equities) and pass significant amounts of equity returns to participating policyholders.

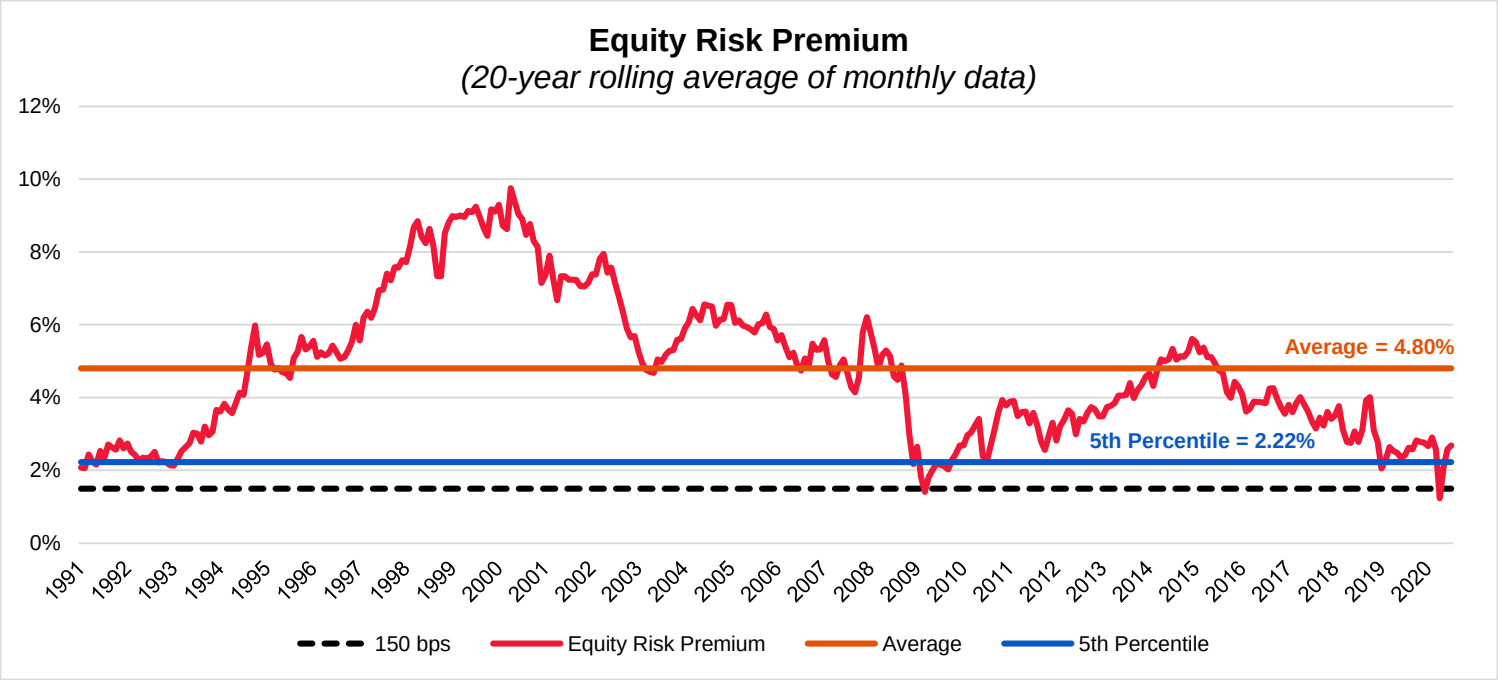
Whilst it can be difficult to demonstrate cash-flow or asset-liabilities matching via equity investment, companies do expect to earn additional returns exceeding risk-free rates on equity investments over the long-term. No allowance for an equity risk premium can be punitive, especially for illiquid equity assets with higher investment fees and commissions (i.e. private equity) than listed equity or fixed income assets.

The current LTA calibration at 1.0% targets to address this imbalance by providing some relief for holding equity investment supporting long-term insurance liabilities. This in turns provide an avenue for policyholders to participate in potentially higher long-term growth from these asset. Calibration of the quantum of this LTA does incur significant judgement and is critical in determining the relative attractiveness between fixed-income vs. equities, which would drive the asset allocation decisions of insurers and product offering to customers.

The purpose of the following slides is to demonstrate that 1.5% is justifiable based on historical data. It is a policy decision whether to increase the LTA to 1.5%, leave it unchanged or increase it to something greater than 1.0% but less than 1.5%.

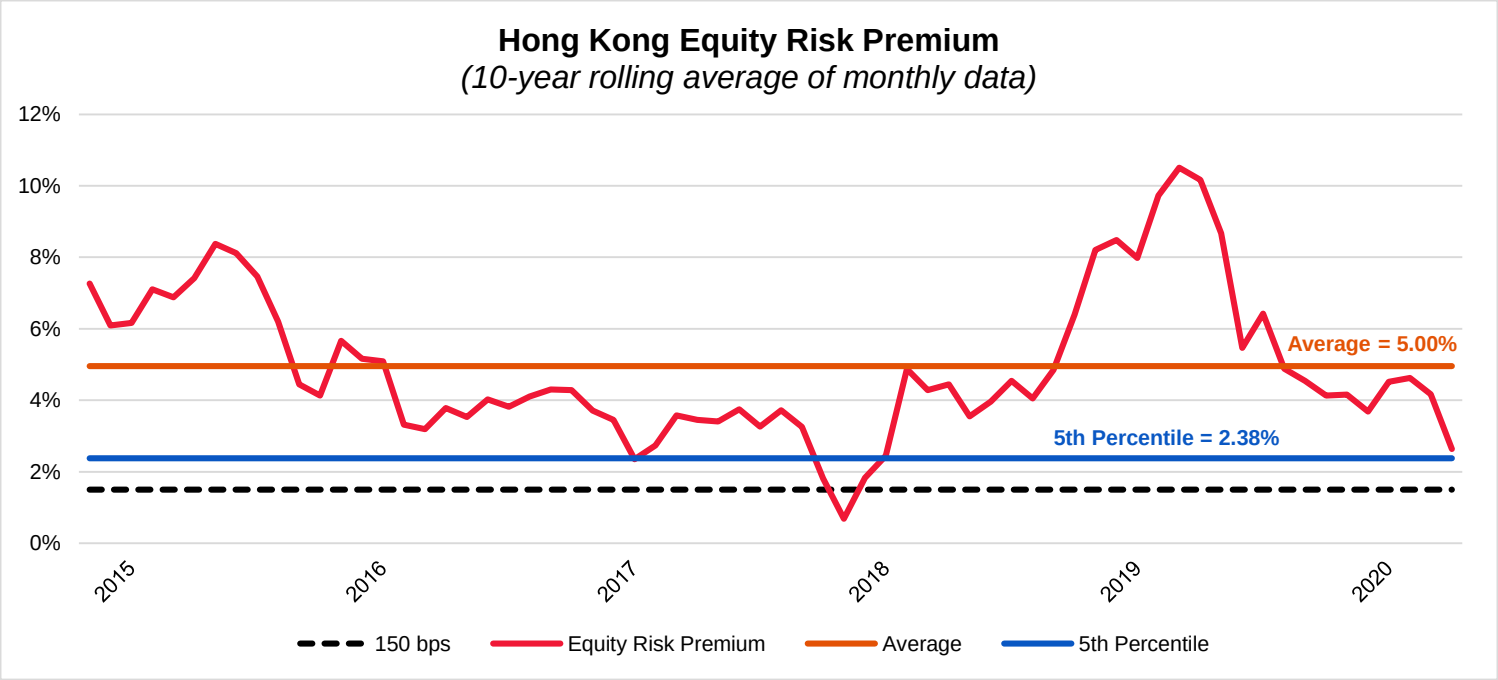
An alternative approach is to introduce a more tailored stress for equities held over a longer term to reflect the reduced likelihood of losses incurred from equity volatility where trading happens less frequently. This approach would be similar with Solvency II which recently introduced a long term equity stress and consistent with a policy of encouraging infrastructure investment. The Solvency II criteria would, however, need to be amended to fit Hong Kong circumstances.

US Equity Returns



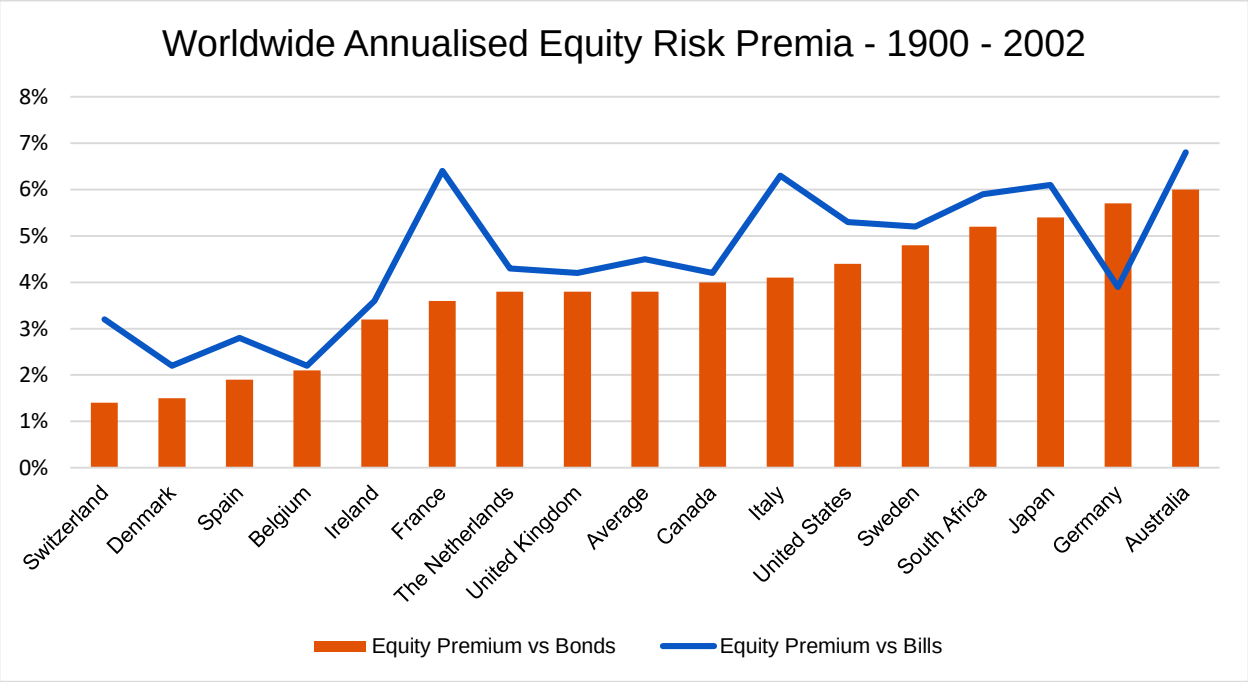
- This graph shows the annualised difference between the 20 year returns of the S&P 500 and the US 10 year government bond rates based on monthly data from January 1971 to July 2020 (595 data points resulting in 355 20 year averages).
- Average 20 year excess return is 4.80%, 5th percentile is 2.22%. The 1.50% barrier was breached twice, once in March 2009 (at 1.41%) and again in April 2020 (at 1.23%).

Hong Kong Equity Returns



- This graph shows the annualised difference between the 10 year returns of the Hang Seng Index and the Hong Kong 10 year government bond rates based on monthly data from November 2004 to April 2020 (186 data points resulting in 66 10 year averages). Longer data series was not readily available.
- Average 10 year excess return is 5.00%, 5th percentile is 2.38%. The 1.50% barrier was breached once in November 2017 (at 0.69%).
- 10 year rolling average excess returns are, of course, more volatile than 20 year returns would be.

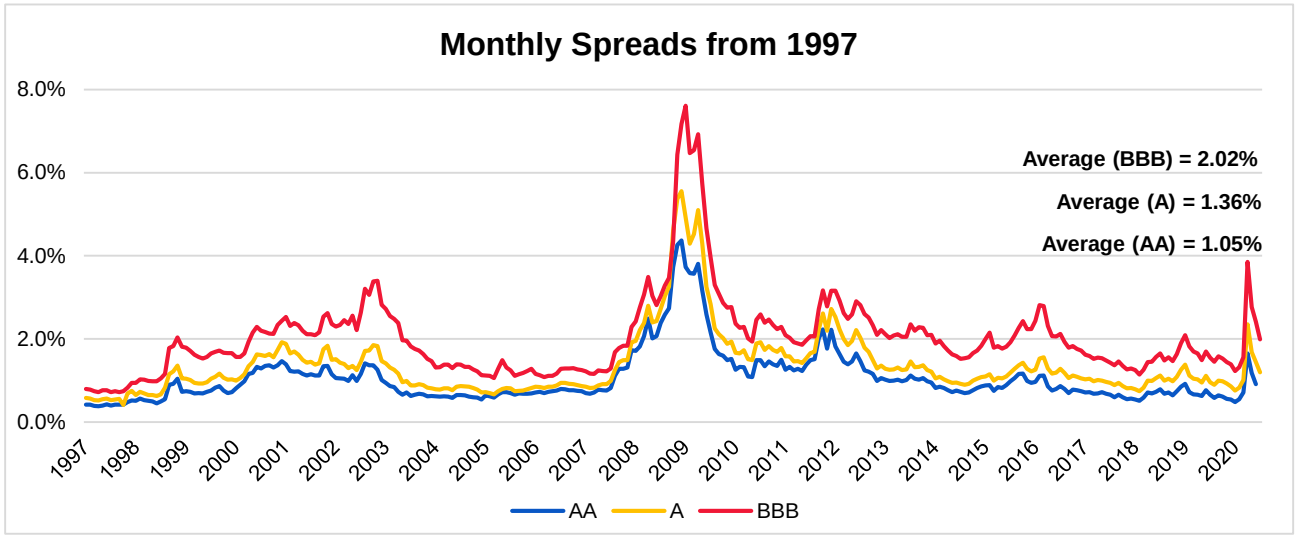
International Equity Returns

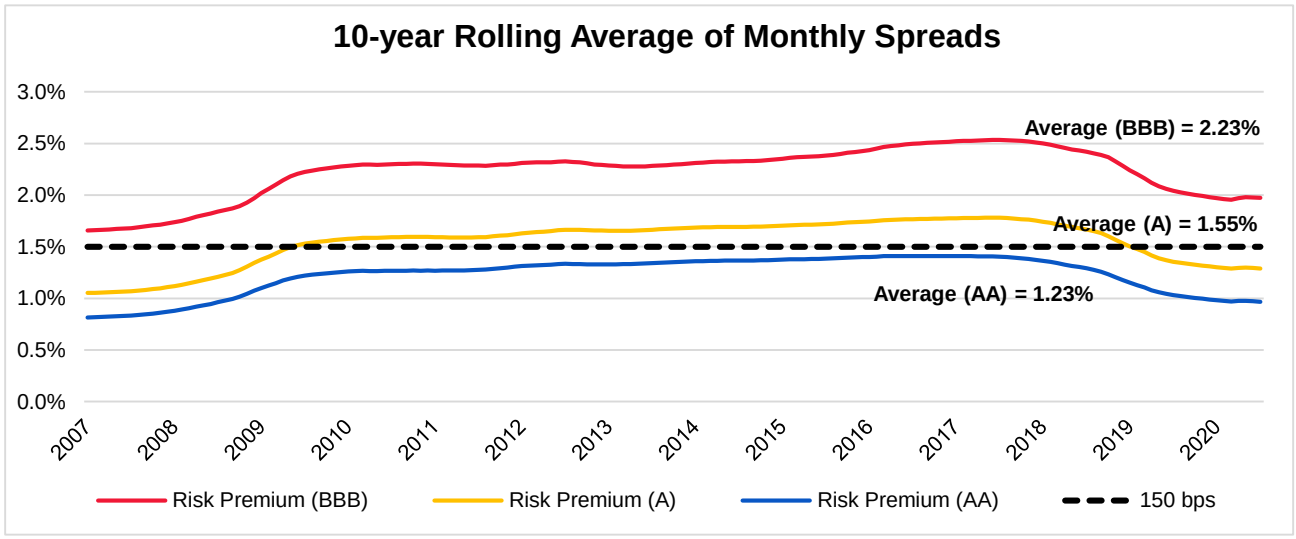


Source: Dimson, Elroy and Marsh, Paul and Staunton, Mike, Global Evidence on the Equity Risk Premium (August 1, 2003). Journal of Applied Corporate Finance, Vol 15, No 4, pages 27–34; LBS Accounting Subject Area Working Paper No. IFA 385. Available at SSRN: https://ssrn.com/abstract=431901

- The graph above shows the arithmetic average of annual equity risk premiums in different developed markets against short-term and long-term risk-free securities.
- It is clear that this experience is not unique to the US

US Corporate Spreads





- Monthly credit spreads from January 1997 to July 2020 based on the ICE BofA 5-10 Year US Corporate Index with Bloomberg IDs C6A2, C6A3 and C6A4 for AA, A and BBB respectively (283 data points resulting in 163 10-year averages).

- Average spreads for the period 1/1/1997 to 7/1/2020:

  AA: 1.05%

  A: 1.36%

  BBB: 2.02%

Rationale

- Many insurance liabilities are very long tailed with cashflows extending substantially more than 20 years
- For such liabilities it is common to invest in equities to capture the expected Equity Risk Premium. Particularly because few other assets exist that can be used to hedge such long term obligations
- A reasonable equity risk premium should therefore be recognised in the valuation of long term liabilities
- We take the view that liabilities should be valued based on a prudent estimate of what the insurer can reasonably expect to earn on the supporting assets, NOT an arbitrage-free pricing approach
- A paper is available that give further details

Proposed Technical Adjustment

Consider increasing the LTA to 1.50%. This is a policy decision. 1.5% is no more actuarially correct than 1.0%. Both are justifiable.

- As noted in our comment letter of 18 May 2019, there is a range of views within the Task Force on inclusion of an equity risk premium. The point of our recommendation is to point out that a 1.50% LTA is justifiable based on historical experience.

Align Overly Conservative Aspects with ICS

- Funds on Deposit

2A

Funds on Deposit

The spread earned on **Funds on Deposit (FOD)** is a significant source of profit for many HK insurers, yet QIS 3 does not recognise this. The stated reason is that these profits are uncertain because the funds can be withdrawn at any time. However:

- ✓ Studies show that withdrawals of these funds follow the experience of the polices they're associated with;
- ✓ Even during the GFC, excess withdrawals were not material; and
- ✓ The ICS and Solvency II both recognise these profits. The risk of withdrawal is catered for through the lapse risk charge.

Proposed Technical Adjustment

Recognise profits from FOD consistent with the ICS.

Align Overly Conservative Aspects with ICS

- Homogeneous Risk Groups

2B

Homogeneous Risk Groups

Homogeneous Risk Groups (HRG's) defines the level at which insurers can aggregate products for measuring insurance risks.

- QIS 3 has adopted a definition that is considerably more prescriptive than the ICS
- The ICS definition is more principles-based
- We believe the ICS definition better aligns with the industry's risk and capital management practices, and allows reflection of the way the business is managed in practice.

Proposed Technical Adjustment

Adopt the ICS definition of Homogeneous Risk Groups.

Comparison of ICS and HK RBC Definitions of HRG's

HK RBC QIS3 Technical Specification	2020 ICS Technical Specification
381. From a practicality standpoint, for the calculation of life insurance risk charges, grouping by portfolios of products (or policies) exposed to homogeneous insurance risks within the class can be applied. In deciding on the appropriateness of grouping of policies, participants should ensure that portfolios of products (or policies) exposed to homogeneous insurance risks are grouped together. 382. A homogeneous risk group (HRG) encompasses a collection of policies with similar risk characteristics. These policies are exposed to homogeneous insurance risks, and may be grouped together for the purpose of applying a zero flooring or determining whether an upward or a downward stress should be applied for the calculation of life insurance risk charges, unless otherwise specified. 383. HRGs are expected to be reasonably stable over time. In assessing the homogeneity of risk characteristics within the group, participants should take into account factors including but not limited to: • Underwriting policy • Risk profile of policyholders • Product features, in particular level of guarantees to policyholders or premium paying term • Future management actions 384. Participants are expected to determine the appropriate granularity of policy grouping in a sound and prudent manner, meanwhile taking into consideration the principles of materiality and proportionality. In case there are significant offsets among policies within a product, it would be more prudent to further split the product into different HRGs. In other cases where a number of products are exposed to similar risk characteristics, it may be more pragmatic to group these products into the same HRG and allow for some offsets among these products. 385. As a rule of thumb, significant offsets between policies within the same group for any particular risk may warrant a more granular split. Details of the policy grouping and further breakdown of the stress impacts, by product code for instance, should be made available to the IA upon request.	273. For life risks, stress scenarios are applied at the level of homogeneous risk groups. The projections of the stressed cash flows are conducted at the same level of granularity as the pre-stress cash flows. Where the pre-stress cash flows have been projected by applying some grouping of policies, the same grouping of policies is applied to the stressed cash flows. 275. From a practicality standpoint, grouping by portfolios of products (or policies) exposed to homogeneous insurance risks within the class can be applied. For this purpose, a homogeneous risk group encompasses a collection of policies with similar risk characteristics. 276. Homogeneous risk groups are reasonably stable over time. Where necessary, for the determination of homogeneous risk groups, IAIGs take into account items such as: a. Underwriting policy; b. Claims settlement pattern; c. Risk profile of policyholders; d. Product features, in particular guarantees; and e. Future management actions. 277. For some policies, an upward stress may produce an increase in the risk charge, while for others a downward stress may result in an increase in the risk charge. Even if cash flow projections are mostly performed at a policy level, to determine whether to apply an upward or a downward stress, it is necessary to decide on the appropriate grouping of policies. The level of prudence of the resulting risk charge depends on the granularity of the policy groupings adopted by the IAIG.

Reflect Economics of Callable Bonds

- Define First Call Date Based on Substance, Not Form

2C

Define First Call Date Based on Substance, Not Form

Make Whole Callable (MWC) bonds are common investments of many HK insurers. MWC bonds have the following key features:

- They can be called at any time
- The call price is determined based on a discounted CF approach. Discount rate is "reference rate + credit spread". Usually, the reference rate would be UST of the same tenor and a fixed credit spread e.g. 50bps which is much lower than a A / BBB rated spread

For the current MA calculation in QIS 3, it is required to assume that callable bonds are called on the first call date, regardless of how insignificant the likelihood of the call actually occurring on this date is.

The above mentioned MWC bonds therefore must be assumed to call immediately, which results in a modified duration of zero.

As a result, **NO credit spread** is currently recognised in the MA from these assets, which is inconsistent with the market valuation of these assets.

Define First Call Date Based on Substance, Not Form

The IA's rationale for assuming the bond will be called at the first call date is that there is no guarantee that the company can "earn the spread".

However, we believe that there is a high degree of certainty that the **spread can be earned on MWC bonds**, and are supported by the following economic arguments:

The make whole provision is very costly for the issuer to exercise so it is highly unlikely that the call would be exercised

- ✓ The spread used to calculate the call price is much lower than the spread on the bond (50 bps vs. >100 bps), making the call price higher than the market value.
- ✓ Even if the bond is called, there will be sufficient compensation to reinvest the proceeds so as to earn more than the original because the proceeds would exceed the market value.

Failure to recognise the credit spread on these assets would have a significant impact on the capital position of HK insurers. It would restrict companies from investing in callable bonds, and placing an artificial constraint on ALM practices.

We believe such bonds would qualify under Solvency 2 and ICS.

Benchmarking other Capital Regimes

	Solvency II (UK PRA)	ICS (2020 Data Collection Exercise)
Treatment of callable bonds	Treated like plain vanilla bonds if the investor receives sufficient compensation to allow it to obtain the same cash flow by re-investing the compensation in assets of an equivalent or better quality	Not eligible unless it can be demonstrated that it will not imply a loss to the IAIG and that the matching of liability CF can be maintained
Relevant paragraphs	(6) For the purposes of sub-paragraph (4)(k)(i), where issuers or third parties have the right to change the cash flows of an asset, that right does not disqualify the asset from admissibility to the assigned portfolio, provided the investor receives sufficient compensation to allow it to obtain the same cash flow by re-investing the compensation in assets of an equivalent or better quality.	141. Assets featuring call options (used at the discretion of the issuer) are ineligible to back liabilities, unless it can be demonstrated that the exercise of the option does not imply a loss to the IAIG and that the matching of the liability cash flows can be maintained. For example, this can be achieved by using the proceeds of the sale to buy a similar asset on the market that enables the matching of cash flows to be maintained.
Reference	2015 No. 575 FINANCIAL SERVICES AND MARKETS The Solvency 2 Regulations 2015 Section 42(6) http://www.legislation.gov.uk/uksi/2015/575/pdfs/uksi_20150575_en.pdf	2020 ICS Data Collection Technical Specifications https://www.iaisweb.org/page/supervisory-material/insurance-capital-standard//file/90757/public-2020-ics-data-collection-technical-specifications
Conclusion	**Solvency II allows full recognition of the spread on MWC bonds**	**ICS allows full recognition of the spread on MWC bonds**

Define First Call Date Based on Substance, Not Form

The QIS 3 definition of call date will have the effect of eliminating an important class of investments for HK insurers, thereby causing harm to the industry with no offsetting benefit.

The definition is inconsistent with other regimes.

We suggest the IA adopt an economic definition. The ICS definition is one such definition.

Proposed Technical Adjustment

Adopt an economic definition of call date consistent with other regimes, which include ICS and Solvency II.

Apply Favourable Capital Treatment for Qualifying Infrastructure Investments

2D

Qualifying Infrastructure Investments

Infrastructure investments possess unique characteristics that make them good candidates for life and annuity insurers' investment portfolios, particularly under the current challenging investment environment amidst low interest rates:

- Long duration of infrastructure debt provides a good match to long-duration insurance liabilities
- Yield pick-up is available on infra-debt over more liquid fixed income instruments of an equivalent credit quality and maturity
- Favorable credit characteristics revealed in Moody's study and EIOPA's review which demonstrated lower default rates, credit losses, spread volatility and higher recovery rates for infrastructure debt
- Infrastructure investments may exhibit low correlation with other asset classes and within credit risk class which brings diversification to the insurer's investment portfolio

Traditionally, infrastructure projects are mainly funded by governments and development institutions where significant infrastructure funding gaps have been observed, particularly in Asia. Financing for infrastructure projects by the private sector contributes to the economic and social development of regions or sectors in need of funding. It can provide critical support to the Belt-and-Road Initiative ("BRI"), one of the most important initiatives of the central government.

Qualifying Infrastructure Investments

Solvency II provides favorable capital treatment for Qualifying Infrastructure investments, both debt and equity. For example, the capital charge under Credit Spread Risk in the standard formula model relating to infrastructure debt investments is around 33% less than corporate bonds of similar credit quality. Equity Risk charges are also reduced by up to around 20%.

We propose similar favourable treatment under HK RBC, so as to incentivise these types of investments by HK insurers in support of government policy and the BRI.

Under Solvency II, infrastructure investments need to meet various requirements (including risk management and stress testing requirements) to be eligible for the reduced capital charges. Also, criteria for the infrastructure asset cash flows' predictability and replication to liability cash flows can allow for eligibility for matching adjustment application approval. We propose that the qualification criteria be subject to further investigation and confirmation by the IA in order to ensure their appropriateness for Hong Kong. References can be made to the policies and qualifying projects under the BRI and the Asian Infrastructure Investment Bank (AIIB).

Proposed Technical Adjustment

Apply favourable capital treatment for Qualifying Infrastructure Investments