

July 31, 2017

Dr. Victoria Saporta
Executive Committee Chair
International Association of Insurance Supervisors (IAIS)
c/o Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel, Switzerland
Via e-mail to: Romain Paserot

Re: Risk-based Global Insurance Capital Standard Version 1.0 for Extended Field Testing

Dear Dr. Saporta,

The North American CRO Council (“CRO Council”) is a professional association of Chief Risk Officers (“CROs”) from leading insurers based in the United States, Canada, and Bermuda. Member CROs currently represent 31 of the largest Life and Property and Casualty (“P&C”) insurers in North America. The CRO Council seeks to develop and promote leading practices in risk management throughout the insurance industry, and provide thought leadership and direction on the advancement of risk-based solvency and liquidity assessments.

While not all CRO Council member companies support the concept of a Group Capital Standard, its members believe that if one is developed – whether at the jurisdictional or global level - it is imperative for supervisors and standard setters to afford the appropriate time, care, and caution when being designed, tested, implemented, and maintained. This includes, but is not be limited to, robust and comprehensive field testing across a wide range of insurers, scenarios, and – in the case of the IAIS’ Insurance Capital Standard (ICS) – markets so that there is clear understanding of how the capital construct would work. We commend the IAIS for acknowledging the need for such field testing to assess the appropriateness of the ICS and enabling its further development.

The CRO Council shares the view that a group capital framework – such as the ICS – should promote sound risk management and behavior, while minimizing inappropriate pro-cyclical behavior (see ICS Principles 6 and 7). Core to achieving these principles is the need to incentivize proper Asset Liability Management (“ALM”) disciplines, which are foundational to the economics of the insurance business model. While the CRO Council acknowledges ICS Version 1.0 is a developmental step in the broader ICS project, it is incumbent upon us to advise you that the framework does not yet satisfy these foundational principles.

Valuing insurance liabilities consistently with the assets supporting them is a critical step for incentivizing appropriate management of the insurance group and, in particular, proper ALM disciplines. The IAIS acknowledges this in ICS Version 1.0, which notes that “consistency between asset and liability valuation should be ensured” to achieve stability in valuation, which would thereby promote prudentially sound behavior by internationally active insurance groups (IAIGs) and avoid encouraging IAIG actions that would exacerbate a stress event (see paragraph 71). The CRO Council believes the use of “application ratios”, which create a disconnect between the credit spread recognized for purposes of valuing insurance liabilities and the credit spread on investment portfolios supporting those liabilities, violates

the IAIS' stated goal of ensuring consistency. This letter presents compelling analysis on the distorted measures of available and required capital that will arise if the valuation of assets and insurance liabilities are not aligned in the ICS and highlights the broad detrimental effects this distortion would have on consumers (e.g., increased cost of insurance coverage and reduced product offerings) and fixed income markets (e.g., reduced flow of long-term investment). With regard to life insurers¹, a properly designed valuation approach is a critical first step for satisfying the ICS principles and, given its broad impact, is a necessity before shifting focus to other elements of ICS Version 1.0 that warrant refinement. The CRO Council believes that the IAIS' decision to field test the "own assets with guardrails" approach to liability discounting is a promising step towards an ICS that is anchored in ALM disciplines. We also acknowledge and support the progress that has been made, through appropriate refinements to risk sensitivity, towards decreasing the spread between the discount rates the ICS employs to value insurance liabilities and the cash flows from the investment portfolios supporting those liabilities by increasing the application ratios. This letter provides an insurer risk management perspective on the importance of continued progress.

Overview

We recognize that the IAIS is committed to further developing both the GAAP with Adjustments (GAAP Plus) approach and the Market Adjusted Valuation (MAV) approach. This letter focuses on the lack of alignment that currently exists when valuing assets and insurance liabilities under the MAV approach while noting that many CRO Council members consider a book value approach with robust asset impairment and technical provision sufficiency testing to valuing both assets and insurance liabilities to be preferential to a market-based approach.

The IAIS continues to consider incorporating an application ratio within the ICS to address concerns that uncertainty of an insurer's liabilities may require them to sell assets unexpectedly. The CRO Council acknowledges this intent however, we disagree with the approach and suggest that liquidity considerations are best handled in a different construct from capital, such as liquidity stress testing. Further, embedding a liquidity assessment in the discount curve will distort measurement of ALM mismatches, creating volatility in capital measures in shifting market conditions which will drive procyclical behavior while failing to adequately assess an insurer's liquidity needs.

Insurers seek to lock in margins at the time premiums are received through constructing ALM investment portfolios that seek to manage to the expected liability cash flows. While ALM portfolios aim to hedge market exposures stemming from products sold, perfect ALM matching is not always possible given the long dated nature, uncertainty and potentially unhedgeable aspects of some insurance products. Insurers hold capital in addition to technical provisions to absorb potential exposures from ALM mismatches that may arise. In a market-based group capital framework, an accurate measurement of insurers' ALM positioning and the potential exposures arising from ALM mismatches can only be achieved if the valuation of liabilities is aligned with the assets backing them – particularly for long duration products. Divorcing the valuation of assets and liabilities through measures such as arbitrary application ratios produces additional, indirect credit risk charges beyond the credit risk capital requirement. These indirect, "effective" credit risk charges show up through an understatement of available capital – as liabilities are artificially overvalued – and an overstatement of required capital – as liability durations are artificially lengthened, thereby overstating interest rate stressed capital. These

¹ With regard to non-life insurers, Version 1.0 continues to inappropriately categorize certain products written in the U.S. as susceptible to mass torts, as well as using an inappropriate approach to valuing mass torts risk.

“effective” credit risk charges will be volatile, pro-cyclical and excessive as they are duplicative to the explicit credit risk charges within required capital.

The following example illustrates the increase in total “effective” credit risk charges¹ that are created by a misaligned valuation approach and the unintended consequences that would result. Although the example focuses on the impact to Available Capital and Required Capital for interest rate risk, the findings are also applicable to – and would be exacerbated by – other elements of a group capital framework such as insurance risks and any additional overlays of conservatism such as a consistent and comparable margin over current estimate (CC-MOCE). Finally, while the example is based on market value-based capital framework, it is important to note that the core principle of alignment in the valuation of assets and liabilities is critical, whether the valuation is market or book value-based.

Cautionary Example: What Happens when Valuation is Misaligned

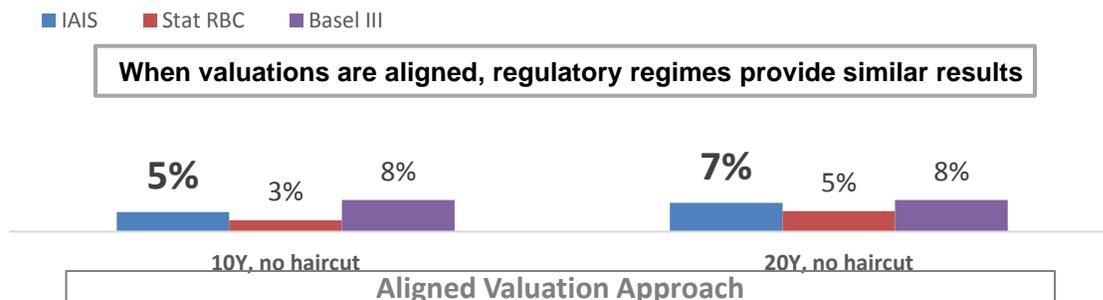
This example assumes perfect ALM matching for a portfolio backing a 10-year liability cash flow and a portfolio backing a 20-year liability cash flow. The portfolio is based on a simplified investment portfolio made up of 90% A-rated bonds and 10% BBB-rated bonds, which reasonably aligns to the average credit quality of a typical U.S. insurance market participant.

This example assesses the total amount of capital held for credit risk when asset and liability valuations are aligned and, for comparison purposes, how these representative IAIS charges align to those within the current U.S. statutory framework and international Basel framework for banks.

Credit Charges as of 12/31/15²

Based on Sample Portfolio (90% A, 10% BBB)

(includes estimate of expected losses in liability valuations with IAIS and Stat capital frameworks)



¹ Total “Effective” Credit Risk Charges result from (1) credit risk captured in the accumulation of reserves for expected losses, (2) factor-based credit risk charges, plus the additional indirect impacts from a misaligned valuation approach through (3) a decrease in available capital from an overvalued liability, & (4) an increase in stressed capital requirements for interest rate risk through an artificially extended liability duration

² Notes:

- For insurers, we include an estimate of capital accumulated within reserves to support expected credit losses as well as capital charges for unexpected defaults and migration.
- The **IAIS Combined Credit Risk Charge** use 2016 ICS Credit Risk Charges assuming a 100% redundancy (based on calibration at a 99.5% stress severity) plus an estimate of expected credit losses embedded in liability values. The misaligned valuation approach additionally includes the impact from misalignment on available capital and interest rate stressed capital requirements
- The **Stat RBC Credit Risk Charge** assumes current C-1 factors at a 400% redundancy (consistent with a AA target capitalization standard) and includes an estimate of expected credit losses embedded in reserves
- The **Basel III Credit Risk Charge** assumes the international standard approach for assessing risk weighted asset charges and is calibrated to a 10.5% risk based capital ratio. The Basel framework captures credit charges only due to lack of overall comparability between banking and insurance capital frameworks.

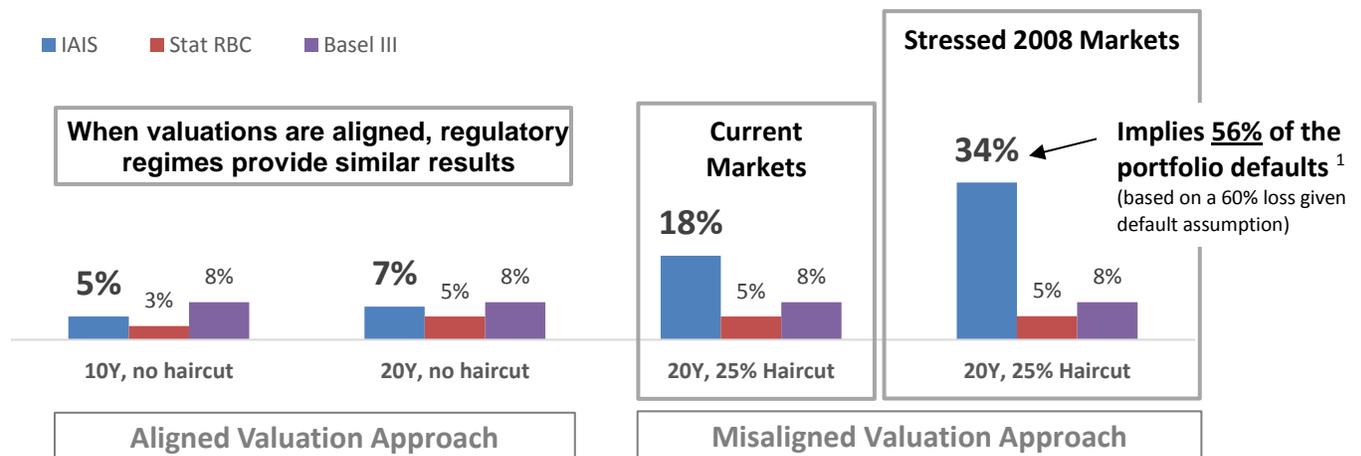
When using an aligned valuation approach, where liability values reflect supporting ALM strategies, net of spread adjustments for investment expenses and expected default losses, available capital and capital requirements directly and transparently measure the portfolio’s credit risks and facilitate a clear understanding of an insurer’s capital position to inform supervisors and guide risk management practices.

Distortion of ALM Positioning

If an arbitrary application ratio is applied to the spread add-ons in the liability discount rate, capital and interest rate risk measures become distorted. By way of the application ratio, an indirect penalty on credit risk is incorporated into the measure of available capital and interest rate capital requirements. These are, effectively, additional forms of credit risk charges that are both excessive (relative to historical experience and comparable capital frameworks) and artificially volatile under shifting market conditions.

To illustrate this, we adjust the portfolio-based spread add on to reflect a 75% application ratio, thereby introducing a “misaligned valuation approach” into the capital measurements. The bar chart is expanded to show the additional credit charges introduced through the mis-measurement of available capital and interest rate stressed capital requirements.

Credit Charges as of 12/31/15, unless noted



¹ 56% of a comparable high quality portfolio defaulting is far more severe than the 35% worst cumulative 20-year default rates that occurred starting in the early 1920s and covered 3 significant credit events, including the Great Depression.

Total “effective” credit risk capital charges triple when a misaligned valuation approach is introduced. Liabilities are overvalued as a result of the application ratio, which reduces available capital. In addition, liability duration becomes artificially lengthened, which makes the liability seem more interest rate sensitive and more sensitive to stressed interest rate conditions than it will be in reality based on the result of ALM strategies. Further, the “effective” credit capital charges will continue to grow: (1) the longer the liability is and would be particularly pronounced for exposures beyond the investable universe; (2) the greater the degree of misalignment created by the application ratio; and (3) in stressed

market environments.

The total “effective” credit capital charges resulting from a misaligned valuation approach are far more severe than is currently required under the statutory Risk Based Capital (“RBC”) framework for U.S. based insurance entities. Further, these resulting capital charges are more than double banks’ credit capital requirements (Basel III). The disproportionate costliness to insurers subject to such charges would significantly disadvantage them relative to banks in their ability to provide credit.

Supporting Detail:

	Current Markets		Stressed 2008 Markets	
	10 Year	20 Year	10 Year	20 Year
1. Reserves accumulated for Expected Defaults	1.4%	3.5%	1.4%	3.6%
<i>bps</i>	<i>14 bps</i>	<i>17 bps</i>	<i>14 bps</i>	<i>17 bps</i>
2. Credit Risk Factors (IAIS)	3.5%	3.5%	3.5%	3.5%
Total Credit Risk Charge (Aligned Valuations)	5.0%	7.1%	4.9%	7.1%
3. Impact to Available Capital (from higher liability values)	2.9%	8.0%	7.9%	19.7%
4. Impact to Interest Rate Stress Charges (from longer liability durations)	0.5%	2.9%	1.3%	6.8%
<i>Artificial Duration Extension</i>	<i>0.3 yrs</i>	<i>1.7 yrs</i>	<i>0.8 yrs</i>	<i>4.1 years</i>
<i>Interest Rate Stress (in bps)</i>	<i>-150 bps</i>	<i>-150 bps</i>	<i>-150 bps</i>	<i>-150 bps</i>
Total Credit Risk Charge (including impact from misalignment)	8.3%	17.9%	14.1%	33.6%
<i>% Capital Increase for Credit Risk</i>	<i>67%</i>	<i>154%</i>	<i>189%</i>	<i>373%</i>
<i>Discount Rate (Aligned)</i>	<i>3.48%</i>	<i>4.38%</i>	<i>5.67%</i>	<i>7.15%</i>
<i>Less 25% Spread haircut</i>	<i>0.29%</i>	<i>0.41%</i>	<i>0.82%</i>	<i>1.00%</i>
<i>Discount Rate (Misaligned Valuation)</i>	<i>3.19%</i>	<i>3.97%</i>	<i>4.85%</i>	<i>6.15%</i>

Notes:

- All factors reflected on a pre-tax basis
- Credit risk factors based on 2016 IAIS FT specs corporate credit risk charges which are calibrated to a 1 in 200 stress severity & 100% target redundancy is assumed
- Interest Rate Stress Charges based on an assumed 150 bps rate decline (slightly less severe than 2016 IAIS Field Test stresses)

Stressed Market Environments (2008 Example)

By further extending the example to stressed conditions, such as those experienced in 2008, one can further see the excessive and non-economic volatility created through a misaligned valuation.

Spreads widened dramatically in the 4th quarter of 2008, as highlighted in the charts below. Under a misaligned valuation approach, capital volatility is artificially exaggerated as available capital drops (see Chart A) and interest rate risk capital grows (see Chart B). It is clear that a misaligned valuation approach would have created unwarranted pro-cyclical outcomes as the volatility ultimately proved temporary and reversed out as market conditions normalized. In a severe market environment like 2008, the artificial volatility introduced by a misaligned valuation approach creates risks to insurers of needing to raise capital at inopportune times and even of becoming insolvent from a regulatory perspective, when, in reality, they may be appropriately ALM matched on a best estimate basis.

Chart A. Change in Available Capital through Time

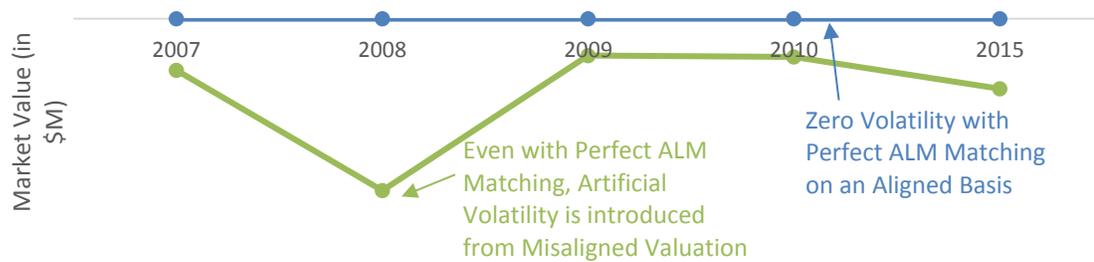
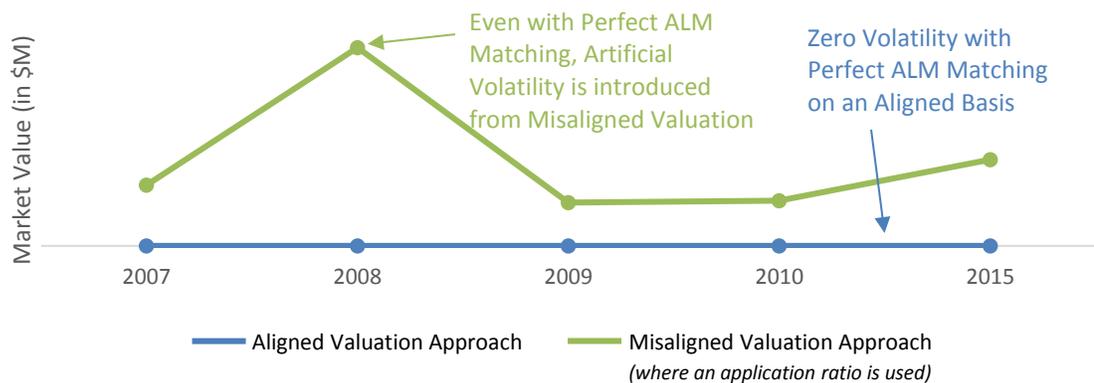


Chart B. Interest Rate Risk Charges through Time



Unintended Consequences for Credit Markets and Societal Protections

Long duration insurance products are critical to societies. Globally, insurers are seeking to offer stable retirement solutions to societal challenges associated with aging populations. In addition, access to life insurance solutions remains a critical element for building and maintaining a social safety net for the middle class. The excessive capital requirements, non-economic volatility and procyclical outcomes introduced by a misaligned valuation approach in a regulatory capital construct would hinder insurers' ability to offer these long-term insurance solutions that, over time, meaningfully contribute to broader social and economic stability and serve as a financing source of stable long-term credit.

Distorting an insurers' ALM position would force companies to consider 2 conflicting risk management objectives:

- (1) To maintain ALM matching on an economic basis and accept capital volatility; or
- (2) To defease capital volatility by managing to a longer and inappropriate liability duration target, generating economic ALM mismatches relative to the expected liability.

Pursuing the latter (#2), defease capital volatility by managing to an overstated liability duration target, insurers will be forced to extend durations when it is most costly to do so and reduce credit holdings as they would give rise to unpalatable capital volatility¹. Over time, insurers may determine it necessary to

¹ Insurers would reduce credit holdings as higher quality portfolios are less impacted from percentage-based application ratios so the volatility created by the misalignment would be reduced. Additionally, by seeking to extend portfolio durations to match artificially extended liability duration targets, investors have more limited access to long duration corporates within the broader long duration fixed income universe.

reduce credit holdings in their long-term asset allocation strategies to better match the inaccurate duration produced by the valuation method. Such actions would ultimately harm the stability of insurers and adversely impact product offerings and the health of corporate bond markets where insurers are meaningful players.

In jurisdictions with deep and liquid credit markets, insurers play a key role in both accessing and sustaining credit markets. For example, within the U.S., insurers own approximately 1/3 of outstanding corporate bonds¹. In those markets, credit spread earnings are critical to insurers' long term profitability and ability to provide affordable insurance offerings to consumers. Because of the long-term and stable insurance business model, insurers tend to stabilize credit markets under stress through their consistency as long-term investors through market cycles. Capital constructs must be properly designed so as not to harm insurers' role as long-term and stable credit market participants.

Conclusion

A capital regime that distorts balance sheet and interest rate risk measurements will give rise to non-economic volatility and promote pro-cyclical behavior. This volatility will ultimately be unpalatable for insurers and thus force management to non-economic, regulatory-driven duration targets and investment strategies.

In time, this will:

- **Force insurers to change investment strategies and reduce credit portfolios**
 - doing so will negatively impact returns on in-force business and reduce the soundness and stability of insurers
- **Remove an essential long-term and stable investor from the credit markets**
 - Misaligned measurement of assets and liabilities would drive insurers to reduce their credit appetite to avoid non-economic volatility
- **Require customers to bear the burden of higher costs for insurance protections**
 - Investment returns, largely driven by diversified credit portfolio, help to support competitive cost of insurance coverage for consumers.
- **Remove long duration products from the marketplace**
 - This will effectively impair insurers' ability to offer key long-term insurance solutions, such as those designed to meet looming retirement challenges that are especially prevalent for aging populations, like the U.S.

To properly measure exposure stemming from ALM mismatches liability discount curve should be constructed in a manner that fully reflects the supporting ALM strategies. Credit risk capital charges should be separately and transparently measured through capital requirements for unexpected default losses and migration. By isolating the measurement of capital charges by risk type, the ICS would result in a comprehensive picture of an insurer's risk profile that is consistent with the way risks manifest. Such an approach would align with the ICS' guiding principles of promoting sound risk management and behavior, while minimizing inappropriate pro-cyclical behavior. The use of, or reliance on, adjustment mechanisms to smooth non-economic volatility or to compensate for deficiencies in assessing asset liability matching would not be an appropriate solution to the valuation debate. Broad application of adjustment mechanisms would add unnecessary complexity to the framework and fail to provide appropriate risk measurement, transparency or incentives. Instead, the ICS should be based on

¹ Source: *Barclays Capital, June 2016*

valuation methods that appropriately align insurance liabilities and the assets supporting them, which would render such adjustment mechanisms unnecessary. The “own assets with guardrails” is an example of a promising approach that would better reflect the connection between asset and liability cash-flows and eliminate the need for adjustment mechanisms. In addition, we would be remiss if we did not reiterate our belief that the liquidity considerations underpinning the IAIS’ use of application ratios would best be addressed through a separate construct such as liquidity stress testing.

Good regulation is good for the industry as insurers world-wide benefit from increased confidence in the industry and its products. By contrast – and as the examples in this letter demonstrate – bad regulation can amplify risk, promote pro-cyclicality and volatility, and undermine the role insurers play in providing protection to consumers and as a stable provider of long term funding in the markets. To avoid adversely impacting consumers, financial markets, and the vibrancy of insurance markets around the world, further development of the ICS should be afforded appropriate time to ensure the final standard is fit for purpose.

The CRO Council acknowledges the IAIS’ achievement in reaching a key milestone with the release of ICS Version 1.0. We look forward to engaging with the IAIS at a technical level over the years ahead and request that the implications outlined in this letter be considered as the IAIS turns its focus toward work on ICS Version 2.0 and beyond.

Sincerely,



Mark Verheyen, Chair
North American CRO Council

cc: Mr. Yoshihiro Kawai, IAIS Secretary General
Ms. Catherine Lezon, IAIS Deputy Secretary General
Mr. Romain Paserot, IAIS Deputy Secretary General & Head of Capital and Solvency
Ms. Julie McPeak, IAIS Executive Committee – Vice Chair
Mr. Hiroshi Ota, IAIS Executive Committee – Vice Chair
Mr. Bernard Dupont, IAIS Executive Committee – Member
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Mr. Urs Halbeisen, IAIS Financial Stability and Technical Committee – Vice Chair
Mr. Steven Seitz, IAIS Financial Stability and Technical Committee – Member
Mr. Paolo Cadoni, IAIS Capital, Solvency & Field Testing Working Group – Chair