BERMUDA MONETARY AUTHORITY

17th July, 2015

Dear Stakeholders:

Re: Economic Balance Sheet & Bermuda Solvency Capital Requirement Trial Run Report 2015

The Bermuda Monetary Authority (the Authority) would like to thank stakeholders for their continued support of our key initiatives. The Authority embarked upon an Economic Balance Sheet (EBS) framework in 2010 and has issued a number of policy papers, conducted field testing and hosted a series of market meetings to develop a framework suitable for the Bermuda commercial insurance market. The support we have received from our industry stakeholders demonstrates the commitment to ensure that Bermuda's regulatory regime is aligned with international standards.

On 19th December 2014, the Authority issued its latest consultation paper on its EBS framework with the draft legislation following in January 2015. These documents reflected the culmination of developments of the EBS proposals into a clear framework for the Bermuda regime. After receiving comments on the consultation paper, the Authority proceeded to issue a trial run to test the EBS proposals on the entire commercial insurance sector.

On 2nd April 2015, the Authority launched the trial run, to test the EBS proposals, which was to be completed by all commercial insurers and insurance groups. The Authority also took the opportunity to enhance the Bermuda Solvency Capital Requirement (BSCR) Model and issued a consultation paper on proposals covering currency risk, concentration risk, geographical diversification and credit risk for cash and cash equivalents. These proposals were also subjected to field testing and formed part of the trial run.

I. TRIAL RUN

The trial run required participants to prepare the EBS on a consolidated basis; and to produce the BSCR, including the proposed BSCR changes, on a consistent basis. The Authority recognised that the information required for the trial run was different from that used in our current practice; therefore the trial run submissions were done and accepted on a "best efforts basis". The Authority conducted a series of workshops on the trial run and posted answers to common questions as 'Frequently Asked Questions' on the Authority's website.

The trial run package contained the following:

a. Detailed specifications for the trial run along with additional guidance notes aimed at providing participants with information to help them prepare their submissions.
b. The Consultation Paper on the proposed BSCR changes.
c. Revised BSCR models for each class of commercial insurer and insurance groups which embedded the EBS specifications within the model, as well as the BSCR proposals. The revised BSCR models facilitated the opportunity to provide more qualitative comments as well.
d. A set of risk free discount curves for eight currencies to ensure that there was consistency in the results obtained.
e. Templates to help participants produce a risk margin amount using simplified approaches. Participants had the option to use their own tools for this purpose if they wished.

II. TRIAL RUN CONCLUSIONS

The Authority received submissions from 65 entities comprising:

- Ten Groups (three of which included Long-Term insurance business);
- 33 Property & Casualty (P&C) Insurers and
- 22 Long-Term (life) insurers

Overall, all the submissions from the insurance groups and P&C insurers showed solvency ratios that looked acceptable Insurance groups generally showed modest increases in solvency ratio while some of the P&C insurers showed significant decreases. As expected, the P&C results were affected by insurers producing the information on a consolidated basis and effectively having a capital charge applied to their insurance subsidiaries.

The Long-Term submissions showed a more mixed position, where some showed a modest increase in their solvency ratio while others showed a modest decrease. There were four Long-Term insurers which indicated adverse solvency positions; however upon further investigation, their specific circumstances did not appear to indicate any fundamental or widespread issues with the proposals. It should be noted that the trial run did not apply the transitional arrangements for Long-Term technical provisions and as such, the Long-Term submissions reflected the full impact of the EBS valuation for technical provisions on the insurer's solvency position.

There were no particular comments raised on the EBS proposals, however there were some comments on the BSCR proposals, even though the proposed changes did not have a significant impact on the overall BSCR results for most submissions. Most comments were focused on the currency risk charge. The approach for the currency risk charge was generally well received, but concerns were raised over the two levels of charges, and in particular the lack of allowance for currency hedging arrangements in the BSCR model. After reviewing these issues, the Authority agreed with the concerns, and has amended the prudential rules governing the BSCR to simplify the charges and to make it clear that hedging arrangements that meet certain requirements can be taken into account. Other than that, there were few significant issues, which are further explained below.

Based on the results of the Trial Run and industry feedback, the Authority concludes that the EBS framework and proposed BSCR changes form a sound basis on which to proceed with the changes to the commercial insurance regime, subject to the more detailed points raised below.

A. Economic Balance Sheet

There do not seem to be any particular issues with the proposals for P&C trial run participants, with outcomes looking similar to previous trial runs issued for this group. Because of the change in reporting basis from a legal entity basis to a consolidated basis, it is not possible to provide a direct comparison between reserves and BSCR ratios under EBS as compared to those currently reported for the P&C insurers. However, the overall conclusion that can be drawn is that solvency ratios under the trial run proposals did not lead to any participants producing solvency ratios that breached the Target Capital Level (120% of the Enhanced Capital Requirement). This is entirely consistent with the findings from previous trial runs / data calls.

The results for Long-Term insurers' seem to be generally reasonable. There were nine submissions that produced results using the scenario-based approach. Typically this method produced results for technical provisions around 10-15% less than using the Standard approach, which seems reasonable. Within the scenario-based approach, there is a 'base scenario'[1] and a range of other scenarios designed to stress the degree of asset-liability mismatch, with the highest outcome being taken. The scenario-based results were around 4% higher than the base scenario, which suggests that there is a good degree of asset-liability matching being undertaken by the Long-Term insurers. There were no particular comments on the range of stresses included as part of the scenario-based approach. However there were some requests for the Authority to reconsider some aspects of how bond default costs have been allowed for in formulating the risk free rates and the standard approach rates in the first place.

Based on the EBS results of the trial run, the prudential rules were finalised in line with the trial run specifications. There were some adjustments and rationalisation of the information to be provided in the notes to EBS to ensure this information will be helpful for the Authority's regulatory reviews. The Authority has not made any changes to the trial run proposals for the derivation of risk-free discount rate curves, the discount rates for use in the standard approach and the specifications for the scenario-based approach. The "Determination of Discount Rates for Economic Balance Sheet" provides details on these methods, and this document is available at: http://www.bma.bm/document-centre/reporting-forms-and-guidelines/SitePages/Insurance.aspx. The Authority will continue to review the adjustments for bond defaults made to the various discount rates, especially in the light of European experiences, but no changes are currently planned.

Additionally some minor amendments were made to the nature of the actuarial / loss reserve specialist opinion requirements based on comments received. The nature of the opinion was changed from an 'adequate' basis to a 'reasonable' basis to reflect the fact that technical provisions are to be set at 'best estimate' levels, and confirmation requested that work done supporting the opinion complies with applicable standards of actuarial practice.

B. BSCR Changes

In general terms, the BSCR proposals were broadly acceptable to the industry, and in most cases did not raise any particular major issues. There were however several useful

[1] The base scenario is broadly equivalent to the Solvency II Matching Adjustment

suggestions made, and the Authority will reflect these comments in the legislation and the relevant guidance, which will be published in due course.

i. Currency Risk

The majority of industry comments were about this module. This is largely due to the varied approaches industry takes to manage this risk. The results showed that in most cases the currency risk charge was relatively modest representing, on average, less than 5% of the total undiversified BSCR total.

Other comments on the currency risk module were as follows:

a. There is a need to incorporate currency hedging arrangements directly within the module. This is now incorporated in the legislation, but further work will be needed with industry to formulate appropriate guidance – in particular with regards to the extent to which rolling foreign exchange hedges can be included in the assessment.
b. Some questions were raised about the two levels of charges contained in the proposals. After further consideration, the Authority has simplified the approach and settled on a 25% charge on any shortfall of assets in a currency compared to the liabilities and proxy BSCR for that currency.
c. Allowance should be made for reduced charges for currencies pegged to other currencies in certain circumstances. While this is not a widespread issue within the Bermuda market, there are certain sectors affected. The Authority considers this issue to be relevant. Whilst it has not been reflected in the prudential rules at present, we will engage in further consultation with affected insurers over the coming months. We anticipate that the resolution may be reflected in guidance or further changes to the prudential rules.
d. The use of a default 35% factor to obtain a proxy BSCR for new insurers proved to be particularly inappropriate especially for Long-Term insurers. This proposal has now been dropped, and instead that the factor will be derived from considering the BSCR for the current year excluding the currency risk factor where there are no previous year’s results to rely on. This means that in the first year of operation an insurer will have to adopt an iterative approach to determining its BSCR, which we expect should not be overly onerous.

ii. Concentration Risk

The proposals did not have a significant impact to the BSCR, typically comprising 4-5% of undiversified BSCR. There was a broad range for the top ten counterparties – comprising from 18% to 45% of total investments (with a mean of 36%). The typical charge on the total of top ten exposures was well below 5%, but was higher for some due to some 'other assets' featuring in the top ten exposures.

The results for this module did not necessitate any adjustments to the proposals for the concentration risk module, except where, from an implementation perspective, the prudential rules have been adjusted to clarify that the risk charge only applies to invested assets (and thus not including recoveries from reinsurers, deferred tax etc. in scope), and that the contribution to concentration risk charge is the same as the contribution to the other elements of BSCR.

iii. Geographic Diversification

Participants in the trial run were given the option to complete this module, and ten of the 43 P&C submissions exercised the option, however more than half of the participants said they would use it in the future once appropriate data could be obtained. There was an average 7% reduction in premium risk and 5% in reserve risk charges, leading to an overall reduction in total BSCR of around 4% (and increase in BSCR ratio of around 20%).

Some P&C insurers indicated that they found it difficult to separate their US business into the four US zones – some suggested that a sensible simplification would be to allow all US business to be put in one zone, and similarly all European, Asian or South American (SA) business could be put in one relevant European / Asian / SA zone. This would be a prudent alternative, and would allow some benefit to be obtained. Guidance will be amended in due course to include this simplification.

Long-Term insurers suggested that this approach might be applied to business for which 'net amount at risk' was the basis for the risk charge, i.e. protection business. This suggestion is one that will be further considered by the Authority later in the year.

iv. Credit Risk Charge – Cash and Cash Equivalents

This risk charge had a negligible impact on the overall BSCR. About 75% of submissions had a reduction in charge compared to the current flat 0.3% charge. The average charge, however, turned out to be 0.5% - mainly driven by some submissions not identifying their top ten individually, but simply amalgamating all their cash in one default bucket and accepting the maximum 9% charge. The average diversification adjustment applied was 19%, but there was a wide range from 0% to over 30%. Given the outcome of the average charge there would appear to be no reason to amend the proposed calibration.

v. Interest rate and Liquidity Charge

There were few comments from participants on this risk charge. For P&C insurers, it had almost no impact. However the impact was greater for Long-Term insurers arising from the increase in assets in scope for the assessment, though nothing seemed to indicate any changes were needed to be made to the prudential rules.

III. NEXT STEPS

As we progress further to implementing the EBS framework, the Authority will conduct a further trial run during the course of 2016 and will exercise its powers under Sections 29A and 29B of the Insurance Act 1978 to mandatorily require all commercial insurers and insurance groups to participate in the trial run on a best efforts basis. The purpose of the trial run in 2016 would be to assist insurers and insurance groups in addressing any residual issues before the first regulatory filing for the financial year commencing in 2016 is submitted in 2017.

The Authority will continue to engage with industry over the coming months and we look forward to the continued support we have received on the various initiatives geared towards enhancing Bermuda's regulatory framework.

Yours respectfully,

Bermuda Monetary Authority