

# SAM focus

Helping insurers understand and manage change

***The recently issued third Quantitative Impact Study (“QIS 3”) represents an important step in moving from the development phase to the implementation phase of SAM***

November 2013

QIS 3 is the final quantitative impact study before the SAM parallel runs commence in the second half of 2014. The requirements provide a good indication of the final SAM framework.

QIS 3 is compulsory for all insurers and insurance groups, which will require formal sign-off by the public officer. Furthermore, the FSB has indicated a clear preference of evidence that the board were involved or otherwise noted the submission.

There is no prescribed reporting date, but it should not be earlier than 31 December 2012. Insurers will have to submit their QIS 3 results by April 2014 for solo entities and by mid-May for insurance groups.

## **Technical provisions**

### *Segmentation*

1. The level of segmentation of classes of business for non-life insurance almost doubled to 15 in QIS 3, compared to QIS 2.
2. This will require more granular data to complete QIS 3 as well as additional disclosure/reporting. However, it will provide more information with regard to insurance risk.
3. The increased level of segmentation is done to achieve consistency with the Financial Services Board's (FSB) proposals for authorisation classes of business. It is therefore an important area to consider and provide feedback as part of the qualitative questionnaire.

### *Contract Boundaries*

4. QIS 3 is providing further product specific guidance on the contract boundary, specifically for linked contracts and reinsurance contracts.
5. A short contract boundary will be applicable for policies that meet the following features:
  - No guarantees on any benefit payments, whether on surrender, maturity or death.
  - No guarantees on charges that the insurer may apply to the policyholder.
  - Where the assets held by the insurer are directly linked to the value of the benefit payable to the policyholder (linked contracts).

6. The aim of these changes is to maintain greater consistency with similar contracts sold by other regulated entities such as collective investment schemes.
7. For reinsurance contracts, the ability for reinsurers to review the conditions of the reinsurance contracts, and whether this will result in the termination of the contract, is highlighted as the determining feature of where the contract boundary ends.

### *Discount rate*

8. The default to be used for the risk free rate will be the government bond curve.
9. However for those insurers that match liabilities with swap-based assets, the swap curve may be used to value these liabilities.
10. This aims to reduce volatility in basic own funds since assets and liabilities will be valued consistently, but it would only apply to a limited product set for which asset-liability management is performed off the swap curve.

### *Illiquidity Premium*

11. The default position remains that there is no illiquidity premium to be added. Those insurers who consider it appropriate are invited to provide additional information on what they consider the illiquidity premium should be, and to quantify the impact of an illiquidity premium limited to 50 basis points.

### *Cash back/loyalty benefits*

12. Cash-back/loyalty benefits should be estimated separately from other technical provisions.
13. Insurers are required to calculate such a provision for the accrued portion of the cash-back benefit using a discounted cash-flow method and allowing for the probability of pay-out.

## **Solvency Capital Requirement**

### *Life underwriting risk – Expense risk*

14. Given that insurers experience different effective expense inflation rates depending on their respective growth rates, a 1% absolute addition as was set out in QIS 2 was not considered appropriate.
15. The stress for expense inflation is therefore the greater of a 20% proportionate increase in the base level of expense inflation or an absolute addition of 2%.
16. However an absolute increase of 2% may still not be appropriate for insurers with a declining book. Therefore the maximum of the multiplicative and additive adjustment has to be used.
17. The stress to best estimate expenses remains the same at 10%.

### *Life underwriting risk – Lapse risk*

18. The requirements for QIS3 retain the structure used in QIS2 with a maximum of mass, level and a combination of the two

lapse shocks being applied, although this is different to what was put forward in the draft specifications.

19. The parameter with which mass lapse shocks are applied to individual products has reduced slightly, but the default shock now includes an allowance for keeping expenses constant over a period (whereas this was only used to assess additional quantitative data in QIS2).
20. The level at which this shock is applied, i.e. the homogeneity of groups of policies remains an area of significant judgment.

### *Life underwriting risk – Company specific and industry wide stress results*

21. Insurers are requested to assess the extent to which events are company specific or industry wide as this impacts the extent to which management action (e.g. re-pricing) can be allowed for following the scenario.
22. Where events are company specific, it is less likely that any impact could be recouped via re-pricing as other market participants may not be required to re-price to the same extent.
23. The assumptions around whether stresses are company specific or industry wide, impact a number of sub-modules directly as well as the impact on any risk-mitigating arrangements.
24. Insurers are still requested to choose the assumption that result in the highest capital requirement (i.e.

the least management action).

25. It is important for management to understand what assumptions are being made around the behaviour of policyholders and other market participants and what the impact would be if these do not materialise in practice.

### *Non-life underwriting risk – Expense risk*

26. Following QIS 2, the FSB embarked on a process aimed at recalibrating the non-life underwriting risk-charge to reflect South African experience (QIS 1 and QIS 2 were based off the European QIS 5 calibration).
27. The recalibration exercise resulted in the reduction in the reserve and premium risk factors for the motor (personal and commercial) lines of business as well as for the liability class of business. However these risk factors have increased notably for the commercial property business.
28. The following two methods are required for catastrophe risk:
  - Method 1: standardised scenarios.
  - Method 2: factor-based approach.
29. Insurers can only use the factor based method where method 1 is not deemed possible (e.g. natural catastrophe exposure outside South Africa).
30. The catastrophe risk sub-module has been revised to introduce additional scenarios to be tested under method 1 (specific to

South African insurers and based on feedback from QIS 2). It will be important to take note of the data implications as a result there-of.

31. Further work is still required to recalibrate method 2 for the South African market.
32. Whilst the catastrophe risk sub-module has been improved, it is an area where one can still expect further changes between QIS 3 and the final specifications.

#### *Market risk – Volatility parameters*

33. The market risk module now includes stresses relating to the volatility parameters used when determining the value of options and guarantees.
34. These allowances are included in the interest rate and equity risk sub-modules for the default calculation. Property volatilities are only required to be disclosed for additional information.
35. The calibration approach allows for the use of parameters calibrated to historic volatility as well as option-implied volatility.
36. The resulting difference in capital requirements may be significant for insurers that have substantial embedded derivative products. Solvency II did not explicitly include this stress.

#### *Market risk – Credit and counterparty default risk*

37. A consistent approach is now used to model the credit risk for all assets.

38. However additional information is requested to assess whether an industry wide distinction between more or less liquid assets is practicable and whether this should result in different capital charges.
39. Capital charges have been specified using international rating scales, but the use of mapping tables to derive at international ratings from national ratings, which may be more widely available has been allowed.

#### *Default adjustment for risk mitigation*

40. The adjustment in respect of credit risk associated with risk mitigating instruments and contracts still follows the same approach as QIS2. However QIS3 allows the grouping of the impact of credit risk across a range of issuers/insurers, whereby the calculations can be materially simplified.

#### *Operational risk*

41. Although there are no changes from QIS2 to the QIS3 technical specifications, there has been significant debate on whether to base the calculation on funds under management, or on expenses.
42. The approach taken in QIS3 is to base the risk charge on expenses, but more granular expense information will be required in order to gain clarity on the reasons for diverging expense assumptions.

## **Participations**

43. In QIS2 strategic participations were stressed by applying an equity stress factor to the fair value of the participation. The risk charge was then allocated at the top level of the SCR structure, resulting in no diversification of the risk charge with any other risk charges in the SCR calculation.
44. No diversification benefit was allowed for due to the argument that the strategic participation of an insurer is likely to be in stress at the same time that the insurer (participator) is in a stressed position. This has resulted in significant debate, particularly relating to the appropriate treatment of insurance participations as well as that of financial and credit institutions.
45. The same approach for QIS 3 has been taken as for QIS2, as the default approach, but alternative methods are being tested.
46. A second method is based on a look-through view of the participation, which considers the Own Funds, fair value and the SCR of the participation separately.
47. A third method has the risk charge applied to the fair value of the participation as is done in the default approach. However, for this alternative the risk charge is applied at the equity sub-module level, which then allows for diversification with other components of the BSCR.

## Own Funds

### *Holding company interests*

48. The amount of assets held in holding companies, including cash will be limited as follows:
- Unlisted holding company shares are deducted in full.
  - Listed holding company shares may only be taken into account up to a maximum of 5% of the non-linked assets of the insurer.
  - Cash deposits in a bank which forms part of the same financial conglomerate as the insurer may only be taken into account up to 10% of the non-linked assets of the insurer.

### *Own shares*

49. Currently in South Africa, Own shares are not allowed to be held by a company directly. However it can be held indirectly via collective or other investment vehicles.
50. In most cases where own shares are held it is to match policies where the investment risk is carried by the policyholder to some degree. In these cases, typically, but not necessarily, the amount of own shares held would not be significant.
51. Where own shares held by the insurer and where the policyholder, to any degree, carries the investment risk of these shares, the “delta own funds” calculation either needs to be performed, or if this is deemed

impracticable, it needs to be reasonably estimated.

52. This calculation considers the impact on the insurer’s own funds if the own shares are set to zero.
53. The result of the delta own funds calculation needs to be deducted from the own funds. If this calculation results in a small adjustment to own funds (less than 5% of own funds) it may be ignored.

### *Ring Fenced Funds (RFF)*

54. More than one approach was tested in QIS 2, which had now been limited to a single preferred approach under QIS3.
55. For cell captive insurers allowance is made for the call that the insurer can have on the owner of a cell as ancillary own funds.
56. Cell captive providers will however be required to assess the characteristics of this call in line with the principles provided in the own funds section to determine what tiering should be applied to this call on funds.
57. As a result, this allowance will improve the financial soundness of the individual cells, resulting in a higher level of diversification benefits that can be taken into account across the individual cells.

## Insurance groups

58. In QIS2 a number of different options for the group solvency calculation were tested. This is now limited to test the deduction and aggregation (the default approach) method and the accounting

consolidation method in addition to the current calculation.

59. The groups section has also been revised to include the treatment of the non-South African insurance subsidiaries. The approach allows non-material and non-strategic non-South African insurance subsidiaries to be excluded.

## A closer look at liquidity risk

60. The risk of not having liquid assets as and when needed to cover the insurers’ obligations is a risk that is not explicitly allowed for in the calculation of the SCR.
61. QIS 3 requires that a liquidity shortfall has to be calculated and disclosed. This shortfall does, however, not form part of the technical provisions or capital requirements in the QIS submission.
62. The purpose of the liquidity shortfall calculation is to provide the FSB with information of the shortfall of liquid assets to meet the net cash-flow over a one-year period and subject to the confidence level of 99.5% (as the case is with the calculation of the SCR).
63. This is done by comparing the available liquid assets after a stress event with the cash flow requirements after a stressed event.
64. The liquidity shortfall calculation is intended to indicate whether the management of liquidity risk in severe events should be addressed in more detail under Pillar II.

65. This liquidity assessment only applies to life insurance companies. Furthermore, the calculation only applies to the non-linked assets and liabilities of the life insurers.

### Taxation basis

66. The tax basis to use in QIS3 is the current Statutory valuation method (SVM).
67. Deferred tax would therefore be calculated in accordance with the temporary difference between the carrying values of assets and liabilities in the SAM balance sheet and the related tax base.

### What should you do?

68. QIS3 is the final opportunity for insurers to assess the impact of the SAM proposals and potentially influence the outcome of the final SAM measures.
69. There is also an opportunity to use this exercise to progress towards the implementation phase of your SAM project and address the difficulties experienced in previous QIS exercises such as data, mythologies used, IT systems and processes as well as meeting submission deadlines. But more importantly assess how the new regime will impact your business.

### Questions your QIS3 exercise should answer

70. How will the level of capital cover under SAM be

impacted by either of the following:

- Changes to external conditions.
- Growth or other underlying changes in the business.

This question can be answered by performing the QIS3 exercise at more than one point in time or by assuming a number of scenarios under which the capital cover levels are assessed.

71. Are the parameters used in QIS3 appropriate for your business? Should you consider the use of “User-Specific-Parameters”, Partial internal models or even internal models. This is of particular relevance to niche insurers.
72. How are different products contributing to capital resources and capital requirements? Included in this assessment should be some indication as to how well these products diversify with others. In short, one would need to have a look at capital efficiency on both a stand-alone and diversified basis for a number of products.
73. How would using a different method to project the SCR impact the Risk Margin? Is the current approach representative of the risk associated with the insurer's obligations over the projection period?
74. By identifying appropriate drivers of the SCR, this will also assist in the development of projected SCR to meet Pillar II needs.

If you wish to discuss how we can help you, please call your regular contact or alternatively:

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