Notes from joint CEIOPS / Groupe Consultatif QIS5 workshop

25/26 August 2010

(These notes are prepared by the Groupe Consultatif project manager as an informal aid to workshop participants and other interested practitioners. They include interpretation of discussion of particular questions, but if a definitive interpretation is still required, this should be sought through the usual Q&A process via national supervisors)

Workshop presentations

These may be found at http://www.gcactuaries.org/documents/QIS5_workshop_Aug2010.zip

Message to practitioners

The most important conclusion I drew from the workshop is that practitioners should at the earliest possible opportunity familiarise themselves with the QIS 5 main spreadsheet, including the hyperlinked technical specification, and the associated qualitative questionnaires (complementary Word and Excel questionnaires depending on whether a freeform or structured response is sought). Other materials which should be studied include the regularly updated Q&A document and the several helper tabs and simplification tabs which CEIOPS has started to publish.

Actuaries should test the spreadsheet which inevitably still contains a few 'bugs' and should notify any found to their national supervisor such that corrections can be included in the updating releases planned by CEIOPS for:

- 7 September (definite)

- 21 September (likely)

- 5 October (group issues, and likely to include some hopefully final 'fixes')

Collection of historic non-life and health (NSLT) data

Supervisors, industry, and profession have agreed that more data is needed to provide context for calibration of premium and reserve risk factors and CEIOPS will carry out a data collection and aggregation exercise in parallel with QIS 5 to this end. This will be consulted upon imminently and it is hoped that data collection spreadsheets can be issued in September. Catastrophe impacts will be required to be excluded and some cleaning of raw data is likely to be required. Groupe Consultatif supports the assembly of this more substantial database.

National guidance

The 'official' guidance from e.g. Germany and Finland on the CEIOPS website has been reviewed by CEIOPS for consistency with the technical specification. It is hoped that most QIS 5 guidance from national supervisors can be treated in this way.

QIS 5 Issues and questions *(comments from workshop italicised)*

Valuation

Assets and other Liabilities

How to value pension commitments in solo calculation? To follow IAS 19 but exclude effect of "corridor" or to follow Swedish law and do as done in Solvency I calculations? We wish harmonized treatment in Sweden for solo calculation.

CEIOPS/Commission are aware of considerable variety of employee retirement obligations with the EU/EEA. The guiding principle is to value these obligations on an economic market-consistent basis suggesting IAS 19 without the 'smoothing corridor as a natural starting point. To the extent that this appears inappropriate or causes difficulties in particular jurisdictions, the matter should be raised in the first instance with national supervisors.

Which accounting rules to use in solo spread sheets for companies inside group, the local GAAP or IFRS? E.g. in Finland public medical malpractice is a part of Finnish GAAP, but not a part of IFRS definition of insurance.

See TS V15 – the principle is economic valuation with either local GAAP or IFRS as possible proxies depending on which if either is more appropriate.

Valuation of assets/cash held with banks covered with government guarantees
Can cash held with banks covered by government guarantees be excluded from any default risk allowance? If not, should the government's credit rating be used to determine the probability of default? Should any allowance for a government guarantee be reduced if the guarantee is due to expire within 12 months of the valuation date?

Cash (amounts held at call) is unlikely to give rise to a default risk allowance. Term deposits may however carry default risk, which in turn may be mitigated by guarantees. It is not unreasonable to assume zero default where an explicit and sustainable government guarantee exists, but realistic allowance should be made for default risk otherwise. If appropriate, an explanation of the treatment adopted should be supplied.

Deferred tax
It seems that there is not sufficient consistency of approach. It would be helpful if CEIOPS could provide some additional (and ideally quite prescriptive) guidance in this area.

Will there still be a Long term business fund / shareholder separation : This is relevant for the calculation of deferred taxes/ current tax _for Irish old basis life business_ which is taxed on the basis of surplus declarations from the Long term business fund to shareholder fund ? For with profits business there has to be some kind of LTBF but what about non profits business ?

CEIOPS/Commission recognise that this is a complex area. It is relatively straightforward if only a flat-rate tax on profits is relevant, but becomes much more complicated if for example different assets or revenues attract different tax rates. Some such issues are in the Q&A pipeline.

Balance Sheet (in spreadsheet)

What is the definition of the following assets:

- Cash and Cash equivalent

- Is "cash at bank" included in this category

- Short term bank deposits

- Long term bank deposits

These definitions should follow conventional accounting practice as reflected in the current Insurance Accounting Directive or in IFRS.

Insurance recoverables

What is the definition?

Can you give an example?

These definitions should follow conventional accounting practice as reflected in the current Insurance Accounting Directive or in IFRS.

Technical provisions

Following on from a question I asked at your LMAG presentation, either yourself or Jerome said that GI ROC had no appetite to pursue the issue of bound but un-incepted policies with CEIOPS. I thought I was a sole voice speaking out about this, and that I had misinterpreted the Directive. However, others seem to be arriving to the same conclusion – the Directive does not require it, albeit the Level 2 text is explicit about it.

Given the complexity of doing this properly, and the challenge of data and assumptions regarding it, should the Institute and Faculty be pursuing this with CEIOPS (possibly via GC) rather than ignoring it and spending lots of time and effort in manufacturing weak solutions? I am sure my Board of Directors are not the only ones to have told their actuaries that this is a silly requirement.

The position of CEIOPS is that account must be taken of such obligations and it is not easy to see what would be a valid alternative position.

QIS5 seems to suggest that you can allow for new business in allocating overhead expenses and doesn't seem to limit the allowance to the first 5 years of a company's life:

TP.2.32. For the assessment of the future expenses, undertakings should take into account all the expenses that are directly related to the ongoing administration of obligations related to existing insurance and reinsurance contracts, together with a share of the relevant overhead expenses. The share of overheads should be assessed on the basis that the undertaking continues to write further new business.

TP.2.33. Any assumptions about the expected cost reduction should be realistic, objective and based on verifiable data and information.

However, the final advice on technical provisions (formerly CP39) states:

3.99. Assumptions about expenses based on their own analysis of expenses should not allow for future cost reductions where these have not yet been realised. Notwithstanding this principle, undertakings may anticipate an expected cost reduction relating to the first five years after licensing of the undertaking. Any assumptions about the expected cost reduction should be realistic, objective and based on verifiable data/information.

The question is on what basis should QIS5 be done?

The normal position is to assume 'steady state' new business so that the proportion or amount of overhead expense absorbed by new business activities remains approximately constant. Exceptionally there may be grounds in rare cases (such as a recent start-up) for assuming that the amount or proportion of overheads absorbed by new business increases, provided the undertaking can show that this assumption is supported by credible plans.

Contract boundaries

- Agreed as a very significant issue for all on the call and not at all sensible
- One participant stated what he had privately been told, that the current examples were not what was intended.
- A number of people agreed that what was being asked for what not actually computationally possible, or if it was it would require a significant model rebuild to accommodate (and presumably an interpretation of what is actually wanted)
- Agreed that the best way forward was to make it clear in the QIS 5 feedback exactly what had been assumed (unless clarified for all firms before submission). Ideally firms should provide an estimate of the impact so that the EC know how significant the impact could be if it were to become part of S2
- Someone mentioned following the wording, but not the examples as it was the latter that really caused the problem
- Someone suggested that IFRS phase II Exposure Draft may have some methodology / wording that might help?

The workshop discussion emphasised that it is the wording of the technical specification which is paramount. Agreed that it is desirable that undertakings explain how they have interpreted this in response to the qualitative questionnaire.

Allowance for illiquidity premium for deferred annuity contracts

For deferred annuity contracts the policyholder has the option of a transfer value. X Ltd determines the transfer value based on the realistic liability using current market conditions, so there is theoretically no risk. However a transfer value is generally quoted on request and the individual has upto 3 months to take the cash amount. So in practice there is a small market risk as market conditions may have changed between the quotation date and the payment date.

Our default position is to use a 100% liquidity premium for deferred contracts. This is more reflective of the period of the investments relating to the contract. However there is a case that, at least for contracts who have already requested a transfer value at the date of the valuation, that a 50% rate is used. If this is the case then I think it would be more reasonable to set the reserve relative to the transfer value.

The position as outlined seems reasonable – if such an approach is adopted it should be explained either in the response to the qualitative questionnaire or otherwise. Whether undertakings should adopt this approach may depend on how material is the proportion of the portfolio in respect of which transfer quotes are extant.

One of the key issues for me that seems to be coming up is on market risk related to linked products , if you are allowed bring VIF into the linked TPs then the linked TPS will be less than unit reserves and in theory you can match on a solvency 2 basis by underholding units

and thereby reduce market risk and the risk margin associated with this market risk. BUT will you be allowed underhold units , its seems to me to go against the grain , particularly when you compare with UCITS where they would not be allowed to underhold. So if you are not allowed to underhold units then you have to hold the market risk and the risk margin associated with this market risk ?

It is open to undertakings to hold such number of units as will, with the addition of management charges, suffice to meet expected realisation requirements.

How to demonstrate appropriate treatment of low-probability high-severity events?

Not discussed.

Clarification of scope of unavoidable market risk for purpose of risk margin calculation?

The principle is to assume that the hypothetical transferee will take all steps open to it to hedge market risk, so the unavoidable is that which cannot be hedged – for example the interest rate risk associated with very long duration liabilities.

How to handle transitional approach in relation to liquidity premium?

This is built into the spreadsheet.

As liabilities are valued using a yield curve which allows for liquidity premium this implies that you have to invest in some assets that are risky i.e. have a market risk SCR but QIS5 specs say that you can assume in calculating the risk margin that you do not need to allow for market risk SCR as it is hedgeable ?

This refers to credit risk which in principle may be hedged by CDS. The specification is correct.

We are assuming for unit linked business with no investment guarantees that we can use a risk neutral deterministic approach in calculating the Technical provisions i.e. set the unit growth rate to the yield curve prescribed , but do you have to stochastic runs to prove this is a reasonable approach ?

This was discussed and no specific requirement for stochastic runs was envisaged.

I have some questions about TP.1.21. With regard to the first 16 lines of business each insurance contract should be allocated to the line of business that best reflects the underlying risks at the inception of the contract.

1. In Sweden we issue life insurance contracts where the risk driver at inception is mortality, but after the age of 65 is longevity. According to TP 1.21 they should be allocated to mortality during the whole insurance period. But in the description of SCR for mortality and longevity risk the question is which amount is currently payable at death. Does this mean that these policies should be counted as longevity risk when calculating SCR after the age of 65?

2. We issue an other type of contract which is a savings contract before the age of 65, and thereafter is longevity. Which line of business does best reflect the underlying risk, when there is no insurance risk at inception, but longevity later?

3. What happens when the contract is changed during the insurance period? The policy holder can for example change a contract from a policy with repayment of the premium in case of death (savings contract) to a pure longevity. Should it still be allocated to savings contracts after the change? We do not keep information about the state at inception because it is not valid anymore. Or could this change of the contract count as a new inception?

Questions similar to these have already been dealt with in Q&A.

·   Tax

·   Should premiums include tax?

·   In the case of Future premiums for technical provisions (ref TP.2.22 and TP 2.36)

·   In the case of Premiums under Non-life underwriting risk (ref Page 198)

·   Since tax payments should be included in the technical provisions (ref TP 2.36) then for consistency premiums should include tax?

Premium should not include associated premium-based taxes.

Premium provision
- Should renewed contracts be recognised when the renewal-letter is sent out or when the renewed contract's cover begins? (TP.2.13)

I understand that future Q&A will deal with questions of this nature.

Adjustment of recoverables due to expected default
- When the counterparty is a another (unrated) company within the group. Which recovery-rate and probability of default should we assume?

The principle is of a realistic best estimate.

TP.1.20 segmentation of annuities stemming from non-life contracts within life insurance obligations. Motor Third Part Liability annuities will be segmented here. What risks shall be calculated and how shall premiums be handled; also segmented?

Lapse risk
Revision risk
Longevity risk
Expense risk
Disability-morbidity risk

Not discussed, but note that current and future Q&A cover a number of related segmentation questions.

TP.1.23 segmentation of health/SLT Health. Workers' Compensation annuities will be segmented here. What risks shall be calculated and how shall premiums be handled; also segmented?

Not discussed, but note that current and future Q&A cover a number of related segmentation questions.

What changes will the split of health risks into Income protection and Medical expenses require in Finland (as opposed to the currently reported Accident and Health)?

Not clear what the question is intended to address, in that the specification describes clearly the intended segmentation of 'health' business. It is slightly less obvious where 'accident' business may belong – if this is causing difficulties, it may be raised through Q&A.

Illiquidity premium for annuities – 100%? If not, the ground for the different bucket would be good to know, i.e. the reason for revision risk being the cause for the lower bucket is appreciated.

It is commonly understood that annuities will attract 100% illiquidity premium, but if there is some doubt associated with revision risk, then this should be raised through Q&A.

Are deterministic reserving methods appropriate for a non-life company? Examples of when appropriate, when not. Should the model risk be evaluated somehow?

This is really a matter of professional actuarial judgement. Although Solvency II refers to probability weighting, this does not necessarily require a stochastic approach. Note that CEIOPS has now published a tool for calculation of the best estimate originally developed by the German industry association.

Contract boundaries regarding future premiums of non-life policies. Is it allowed to take account all the premiums of the next 12 months or is lapse rate obliged to take account in some way? On the other hand, when the insurance undertaking has to set premium provision in case of the undertaking becomes a party to the contract? E.g. the insurance undertaking and the policyholder have agreed at 15.10.2009 that the effective date of the new policy term is at 1.1.2010, should the premium provision be set on 15.10.2009 or 1.1.2010?

As noted above, this is addressed by Q&A.

Similar question: how contract boundaries should be applied in case of long term policies in non-life (we have in Lithuania mortgage household policies lasting from several up to 25 or even 40 years – banking sector requires this). Should premiums be taken in this case for the whole policy period, or limited to e.g. 1 year?

See technical specification – it depends on the capacity for 'unlimited' price variation at annual renewal.

Contract Boundary
It is still very unclear for what products you allow for future premiums and for what products you do not , the contract boundary guidelines are not that clear and there may be scope to change product conditions to allow future premiums for a product vs. an almost identical product. The main requirement here is a consistent approach/interpretation on this throughout the EU. The simplest solution seems to allow for future premiums for all products which currently pay an annual premium and then the lapse stress and lapse assumption then requires a higher SCR lapse and any other risks related to renewal of a particular product are captured in the ORSA?

The technical specification wording is paramount.

Future premiums
Our understanding for QIS5, essentially ignoring the
ongoing rows over contract boundaries, is to carry out the valuation assuming all future

premiums on regular premium business are received (subject to decrements etc) in our best estimate cashflows. We will then run a separate valuation with everything the same, except with an immediate PUP of all the regular premium business, in order to isolate the EPIFP, for inclusion in Own Funds Tier 1. Are we interpreting the spec correctly?

Yes

Does the definition of the contract boundary require us to exclude all future premiums on unit linked business where companies have the right to change the charges? The right to change charges may not have a limit in the terms and conditions, but is in practice limited by PRE considerations. If the terms and conditions provide that any increase in charges is restricted to the increase required to cover actual cost increases is that considered to be a limit?

The discussion in the workshop referred to the Q&A discussion of with-profit business which suggests that constraints of this nature mean that the ability to reprice is indeed not 'unlimited'.

Expected profits included in future premium

QIS 5 Technical Specifications (OF.2.4) define Expected profits included in future premium (EPIFP) as a present value of future profits that would be lost if the whole portfolio went paid-up at the valuation date (even policies that do not allow in their policy terms for being paid-up). This is a value different from Present value of future profits (PVFP) and it has not been used by insurers for any purpose so far. Often, it would require massive changes in inurers' models in order to arrive to this single value. Are there any simplifications available how to calculate EPIFP having in mind practicability of the calculation and the QIS 5 time schedule?

CEIOPS and the Commission understand that this is a new requirement although it is of course in the interests of everybody that the amount should be at least approximately quantified. Undertakings are encouraged to carry out the calculations on a 'best efforts' basis and to explain what difficulties may have been encountered.

Secondly, the Technical Specification require that when calculating EPIFP all other assumptions remain unchanged (OF.20). How does this relate to expenses? Often, (a portion of) expenses is modelled as a percentage of premiums. Hence, keeping all assumptions unchanged would effectively result in reduction of the total expenses. Is this what was meant by CEIOPS?

This would seem likely to overstate the 'profit' element of future premiums, so expenses expressed as a proportion of premium should be assumed to continue.

Calculation of EPIFP : It is suggested in working this out that all policies should be assumed to pup and not surrender , the issue being Term assurance policies where there is no facility to pup and what do you do for these cases ? It would be impractical to change the model to try and work out a notional pup value ?

This is an example of an issue to be handled on a 'best efforts' basis.

Splitting Unit linked Technical provisions into whole and expense reserve
QIS5 specs suggest that for linked contracts you need to split the technical provision into the whole amount (the unit reserve) and the expense reserve (which could be negative) ?

This is correct.

Annuities stemming from non-life business
Technical Specifications (TP.1.20) require that annuities stemming from non-life business are treated as life. This means that also reserves and premiums related to annuities need to be removed from original non-life life lines of business in order to avoid double counting. This is simple for RBNS reserve but it is not obvious how this should be done for IBNR reserve, UPR, premium, etc. Is there any guidance available?

This issue is partly covered in Q&A.

The valuation of non-life claims (annuities) in payment
The specification makes clear that such non-life annuities should be categorised as life business. However, we note that the application of life annuity valuation techniques may not be possible and we ask if non-life valuation techniques could be used (while maintaining the life classification). We also note that the Life Underwriting SCR module is not well suited to these claims as they are typically relatively short-term and not subject to significant longevity risk (e.g. they may be unemployment related).

These seem to be reasonable points. They may be covered in present or future Q&A or should be raised with national supervisors.

Contract boundaries
What are the implications of Unfair Contract Terms legislation and or (in the UK) Treating Customers Fairly requirements on the choice of contract boundary for contracts which are written as "monthly renewable", but for which UCT or TCF considerations may serve to restrict the insurers freedom to re-price from month to month?

See reference above to Q&A – these constraints likely mean that the ability to reprice is not 'unlimited' and the premiums therefore fall within the boundaries of the original contract..

Risk Margin
Which of the following two approaches is more accurate to estimate the Risk Margin?

- Calculate the Risk Margin which takes into account the underwriting risk as well as the market risk. Risk mitigation through diversification taken into account.

- The second approach considers one risk margin for the underwriting risks and a further margin which covers the "unavoidable market risk". The formula $UM = \max(0.5*BE(0)*(Dur(passiva)-Dur(aktiva))*(Dur(passiva)-Dur(aktiva)+1)*\Delta R;0)$. to compute "unavoidable" market risk doesn't reflect the shape of the BE cash flows. Further, it the looks like that it states a going concern assumption which should not be the case. Would a change from "BE(0)" into "BE(t)" help to point the issue into the right direction?

Not discussed.

Calculation of Risk margin based on monthly or yearly SCRR
Is Risk margin to be calculated assuming that SCR move monthly or that they only move yearly ?

Normally an annual run-off pattern is sufficient, especially for life business. For non-life business, especially where the risk margin is relatively material, it would be helpful if any more granular run-off pattern could be explained.

How should we allow for unavoidable market risk in the Risk Margin calculation? TP.5.18 seems to invite us to ignore it but in some cases significant portions of business can have very long duration liabilities. But if we can't ignore it, how can we quantify it?

Unavoidable market risk should be taken into account as already noted. In this case it is the risk of very low reinvestment interest rates. Some simplification may be appropriate depending on materiality. The treatment adopted by the undertaking in the context of product pricing may be relevant.

Unbundling
Unbundling Serious Illness Cover (SIC) and Life within same policy :
QIS5 specs require you to unbundle disability from life but it is very difficult to do so , is accelerating SIC benefit a life benefit or disability benefit ?

While unbundling is strictly required, it is open to undertakings to consider that one or other risk driver dominates and proceed accordingly.

Segmentation

Does standalone SIC policies fall under Life or Health: There is a category for disability in Life section so this suggests they can fall into either box ?

It may depend on which risk driver is reasonably deemed to be dominant.

Should Business Interruption be classified as "Fire and other damage" or "Miscellaneous"? From a practical perspective, Fire would make more sense but a strict interpretation of the LOB wording suggests Miscellaneous.

With the exception of 'Accident' and 'Health', all other non-life lines continue to be segmented as under the current Solvency I regime.

New business
To what extent should the next 12 months New Business be taken into account in the SCR calcs? SCR 1.12 suggests it should be allowed for, but SCR 1.14 appears to be saying that, for life business, future New Business does not affect the SCR. It explicitly says the SCR makes no allowance for the "expected profit or loss" on New Business, but is there some implication that "unexpected" losses on New Business should come into the calculation?

As a practical matter, it is not necessary to have regard to new life business. An exception would be if it were planned to write value-destroying new business.

Illiquidity premium bucket approach
This issue relates to funds which have policies which fall into more than one liquidity premium bucket, e.g. a with-profits fund with non-profit business as well as with-profits (and potentially UL/annuities also). Under this scenario you would essentially have at least two "risk-free" reference curves. The liability cashflows would then presumably be discounted with the relevant "risk-free" rate, according to the bucket they fell into. This, however leads to the following difficulties:

- How then do you roll-up the assets returns consistently, given that you have at least two different "risk-free" reference rates for the fund?

- Do you perform some kind of asset hypothecation to the two LP buckets and roll forward at these rates? If yes, then you must then have to re-hypothecate assets at each projection step, as some liquidity premium buckets will run out of assets to back liabilities throughout the projection in certain scenarios?

- What then would you do with any inherited estate? Allocate it to the with-profit bucket?

  How can you perform a hypothecation when there is feedback between the hypothecation and the liabilities? This is likely to be the case if there are any kind of management actions, e.g. with-profit policies could have benefits linked to the free surplus which in turn is linked to the hypothecation. (This situation could be further complicated by the addition of UL to the fund which would essentially bring management actions into two of the LP liability buckets.)

CEIOPS restated the principle that undertakings should follow the technical specification. Some further discussion on practical matters seems likely to be required (principally a UK issue?)

Yield curve and Illiquidity premium

Monthly yield curve for Solvency 2 : For QIS5 there is a yearly yield curve prescribed , eventually for solvency 2 will there be a monthly yield curve given so that systems need to be designed to accept a monthly yield curve ?

No guidance is currently envisaged in this area.

Application of the illiquidity premium, specifically should the illiquidity premium be applied to the discount rate only, or to both the roll-up rate and the discount rate? While the spec is not entirely clear,it does seem to lean towards discount rate only (since it is described within a section headed "Discount Rates"!) - however, for certain types of business (e.g. reinsuring the guarantees only for a portfolio of u/l with guarantees), adding the illiquidity premium to the discount rate only would have the (surely unintended) effect of increasing the liability. Also, it raises the issue of how to calibrate coherent stochastic scenarios if illiquidity is to be added to the discount rate only.

Accumulation and discounting should be handled consistently.

Should unitised with profit contracts use a 75% illiquidity premium or a 50% illiquidity premium?

75%

Treatment of inwards and outwards "profit share / profit commission" arrangements

In some group contracts there can be a "profit-share / profit commission" arrangements where the some fixed proportion of the "profit" realised on the contract is returned to the group policyholder by the insurer. The definition of "profit" for these purposes depends on the

particular terms of the contract in question.

Insurers can similarly arrange reinsurance contracts where they share some of the reinsurers "profit", again possibly termed "profit-commission"

Key aspects of the profit share cash-flows are
1) If claims increase, the profit-share payment reduces and vice versa
2) The payments are contractual and not discretionary.

Queries in the QIS5 context are

a) How should inwards and outwards profit-share payments of the type outlined be treated for the purpose of the calculation of technical provisions?
b) Is a profit share arrangement of this type considered to be a loss-absorbing arrangement as per SCR.2.3?

In principle these should be included in the projected cash flows. Although contractual rather than discretionary, they should provide loss-absorbing capacity (for a reinsurer, for example).

"For technical provisions is there always "mark to model"? There is no market where you can trade these. We use development triangles to estimate the market value. Only a tiny part of the technical provisions we don´t estimate like this. Therefore we use local GAAP-numbers. These numbers have to be mark to model?"

Not discussed – a more specific question may be appropriate.

"Do I have to calculate a net and gross CoCM? Or is it sufficient to calculate the net cost of capital margin and then thereoff calculate the gross CoCM proportional of the net one?"

This question is likely to be answered by a combination of the spreadsheet and helper tabs.

Technical Provisions

Investment Income

Why is investment income excluded from the cash in-flows to calculate the technical provisions

Because allowed for by discounting.

SCR Standard Formula

Overall structure

Is there any background as to why there is no need to allow for 1 year of new business for life insurance business? It seems clear that this is the case (from the CEIOPS Q&A dated 10 August 2010) but there does not seem to be any specific reason.

Can anyone explain why the 1 year of new business is needed for non-life business?

Is the 1 year of new business needed for health business as well or does this depend on the split of health business into SLT and non-SLT?

As I understand it, this is essentially a practical distinction on materiality grounds. The principle of Solvency II does embrace allowing for the impact of new business over the next year, but this impact would normally be expected to be immaterial for life business. It is also linked to the difference in nature between life and non life business and therefore the difference of modelling the SCR U/W for life and non life.

If you evaluate insurance and market risk by an internal model, and counterparty default risk by the standard formula, do you use the internal model figures for insurance and market, which are needed as input in the default risk – or do you have to calculate the insurance and market by the standard formula too?

The QIS 5 spreadsheet effectively requires parallel internal model and full standard formula calculations throughout. Where as in this example a partial internal model is used, the spreadsheet does not prescribe how the results of this are to be integrated with the standard formula. It is however incumbent on undertakings to justify the basis they have used.

Loss absorbing capability of technical provisions and deferred taxes

This query gets stranger… looking at the QIS5 solo template, the LACOTP calculated using the SES is defined as the difference between:

- the basic SCR calculated using the modular approach

- the net SCR calculated using the single equivalent approach – this is to be reported in the template

This seems very odd to mix the two approaches (although this mixing is also seen in the risk margin calculation).

However, it also implies that you will need to calculate the SES for all entities since the net SCR under the SES will be different to the net SCR under the modular approach (due to non-linearity for example). Also, if you don't calculate the net SCR for each entity, you won't be

able to fill in the whole QIS5 template (since there is a space for the net SCR calculated under the SES).

In addition, the LACODT is calculated using the impact of the SCR and the adjustment calculated above. Since the adjustment will differ under the SES compared to the modular approach so the LACODT will differ.

Hence I expect that the answer is that the SES will be required for all entities.

I've outlined the formulae and an example of an entity with no discretionary benefits below. [For entities with discretionary benefits, I think that the calculations are definitely needed but I can sketch out an example if that would help?]

I have used the formulae from the QIS5 technical specification with additional subscripts to indicate which method is being used – SES for single equivalent scenario and MOD for the modular approach.

The output from the SES is:

$$Adj_{SES} = Adj_{TP\ (SES)} + Adj_{DT\ (SES)} \text{ (per SCR.2.9.)}$$

Looking at the adjustment for the loss absorbing capacity of technical provisions:

$$Adj_{TP\ (SES)} = -\min(BSCR_{Mod} - nBSCR_{SES};\ FDB) \text{ (per SCR.2.11. , SCR.2.12. and SCR.2.13.)}$$

And this is where it seems odd – the difference requested above does not make any sense… It's not isolating the impact of the loss absorbing capacity of technical provisions because it's mixing the modular and SES approaches!

Anyway, in respect of an entity with no discretionary benefits, we would have:

$$BSCR_{Mod} < nBSCR_{SES} \text{ due to non-linearity}$$
$$\text{Hence } BSCR_{Mod} - nBSCR_{SES} \text{ is negative}$$
$$FDB = 0$$

So:
$$Adj_{TP\ (SES)} = -\min(BSCR_{Mod} - nBSCR_{SES};\ FDB)$$
$$Adj_{TP\ (SES)} = -(BSCR_{Mod} - nBSCR_{SES}) \text{ (which is assumed not to be equal to zero because of non-linearity and hence this would result in a positive } Adj_{TP\ (SES)})$$

The technical specification says that the overall adjustment should not be positive (i.e. should not increase the SCR) (SCR.2.10 – as corrected in the errata!):

$$Adj_{SES} = Adj_{TP\ (SES)} + Adj_{DT\ (SES)} \text{ (per SCR.2.9.)}$$

Now, as above, $Adj_{TP\ (SES)}$ is positive but $Adj_{DT\ (SES)}$ is still negative (i.e. would reduce the SCR). So Adj_{SES} would still be negative if the absolute value of $Adj_{TP\ (SES)}$ was less than the absolute value of $Adj_{DT\ (SES)}$. In my opinion, this would be the case (but would depend on the extent of the non-linearity impact and the tax recoverability).

Hence, the adjustment will not be equal to zero for an entity with discretionary benefits and thus should be calculated for all entities.

Now, in trying to make sense of the formula for the Adj$_{SES}$:

$Adj_{TP\ (SES)} = -(BSCR_{Mod} - nBSCR_{SES})$ (as above)
$Adj_{TP\ (SES)} = -BSCR_{Mod} + nBSCR_{SES}$

I have looked at the overall SCR formula:

$SCR_{MOD} = BSCR_{Mod} + Adj_{Mod} + SCR_{Op}$ (per SCR.1.27.)
$SCR_{MOD} = BSCR_{Mod} + Adj_{TP\ (MOD)} + Adj_{DT\ (MOD)} + SCR_{Op}$ (per SCR.1.27.)

If you substitute the QIS5 formulae for the SES adjustments you would get:

$SCR_{SES} = BSCR_{Mod} + Adj_{TP\ (SES)} + Adj_{DT\ (SES)} + SCR_{Op}$ (per the above but using the SES adjustments)

$SCR_{SES} = BSCR_{Mod} - BSCR_{Mod} + nBSCR_{SES} + Adj_{DT\ (SES)} + SCR_{Op}$ (substituting the formula for $Adj_{TP\ (SES)}$ per the above)

Which simplifies to:

$SCR_{SES} = nBSCR_{SES} + Adj_{DT\ (SES)} + SCR_{Op}$ i.e. this is the SCR calculated using the SES!

So in this context, the way QIS5 is asking for the $Adj_{TP\ (SES)}$ to be calculated makes sense – i.e. as an adjustment to the gross modular SCR calculation to derive an SES version of the SCR.

The single equivalent scenario calculation is quite fully specified by CEIOPS. The non-linearity dimension is not intended to be taken into account.

nBSRC and equivalent scenario

The calculation of the nBSCR with the results from the equivalent scenario (ES) might lead to a ring closure: Consider that an undertaking needs to adjust the parameters that determine the amount of future discretionary benefits in order to react on the risks from the sub risk modules or in order to reach a certain target value (f.e. solvency rate, relative or absolute value of future discretionary benefits, return on invested capital,…). This change of the amount of future discretionary benefits affects the net and gross capital requirements in the sub risk modules. Therefore, the weights for the ES and consequently the n SCR might change in an unpredictable manner. Moreover, following the technical specifications, this leads to a recalculation of the capital requirement under the ES. This might be done following a policy-by-policy approach if no internal model is used and might therefore demand an immense amount of new projections. Is this procedure intended by CEIOPS?

The single equivalent scenario calculation is quite fully specified. Practitioners should study the spreadsheet and raise specific issues through the formal Q&A process.

Calculation of the scaling factors for the equivalent scenarios

In the QIS5 pre-test Excel-sheet, the scaling factors for the sub-risks are calculated by dividing each of the calculated weightings (column L) by the sum of the sub-risk capital requirements. This seems to be incorrect in view of the technical specifications (mainly SCR.2.12.) and the examples provided in annex J of the technical specifications. Instead, one should divide each of the calculated weightings (column L) by the – in terms of annex J – "aggregate, diversified capital requirement", i.e. by the value of the field "Capital requirement for … risk".

Practitioners should review how the single equivalent scenario is implemented in the QIS 5 spreadsheet in the first instance.

nBSCR in CEIOPS-Sheet

It seems unclear how the cells for the nBSCR and the FDB should be filled in the QIS5 pre-test Excel-sheet and whether these fields should be filled by the undertaking (after calculating the nBSCR in the equivalent scenario, the FDB and the value of intangible assets) or if these fields should be filled by a mechanism that is implemented in the excel sheet. Following the technical specifications (mainly SCR.2.12.), the former seems to be more appropriate because the derivation of the capital requirements for the sub-risks under the equivalent scenario should follow a policy-by-policy-approach. Which approach is intended by CEIOPS and in which way should the calculations be carried out (i.e. within the (pre-)test or externally by a policy-by-policy-approach)?

Note that parallel testing of the modular and SES approaches to evaluation of loss absorbency is integral to QIS 5 (so that a decision may be made as to which if either approach is to be preferred for implementing measures).

Deferred tax Adj allowed in SCR

You are allowed to take into account a deferred tax adj in calc of SCR provided that you can show that it is recoverable within a reasonable timeframe. But how do you assess what is a reasonable timeframe and what scenario do you assume in assessing whether there will be future profits to cover this tax loss i.e. do you us a best estimate scenario or an adverse scenario that equates to the total SCR shock ?

I think the principles of Solvency II would allow one to take credit for any deferred tax asset in the stressed scenario to the extent that it could be 'franked' by future profits to be earned within a few years in that scenario. See SCR 2.15 of Technical Specification.

Adjustment for loss absorbency of Deferred Taxes

How should we calculate the adjustment for loss absorbency of Deferred Taxes in the SCR? SCR 2.15 & SCR 2.26 both say "the value of deferred taxes should be calculated as set out in the section on valuation", but what is this referring to? Is it referring to

the Table in V.1.4 "IFRS Solvency
adjustments for valuation of assets and other liabilities under QIS5"?

See preceding question – there should be an expectation of earning taxable profits in the stressed scenario. Also note that CEIOPS expects to issue further guidance on treatment of deferred taxes through Q&A.

SCR Operational risk

SCR Intangible asset risk module

SCR market risk module

In relation to the correction for SCR.5.22:

Previous: SCR.5.22 Irrespective of the above stress factors, the absolute change of interest rates in the downward scenario should at least be one percentage point. Where the unstressed rate is lower than 1%, the shocked rate in the downward scenario should be assumed to be 0%. **This constraint does not apply to index linked bonds (i.e. those which contain no material inflation risk).**

Corrected: SCR.5.22 Irrespective of the above stress factors, the absolute change of interest rates in the downward scenario should at least be one percentage point. Where the unstressed rate is lower than 1%, the shocked rate in the downward scenario should be assumed to be 0%.

Have your clients raised any issues with this correction?

The corrected version suggests that the stressed real yield curve is floored at 0% for the interest rate down stress. However, my client's base real yield curve contains real yields that are below this 0% floor. Have you come across this with your clients?

I understand that this will be addressed in Q&A (now Q85). CEIOPS indicated that the likely solution will be to use the shocks prescribed for nominal yields.

Spread risk (5.103) I just want to check the treatment of the last component "delta-liab(ul)" in the simplified calculations for the spread risk on bonds. What is your interpretation of that component based on QIS 5 tech specification? And your justification for your interpretation? My understanding is that if the impact of that component is negative, then the minimum value of zero applies. However, it does not quite make sense for unit-linked liabilities because it's most likely going to be negative impact, and if we can't take credit of this offset then what's the point of having that component there?

Not discussed, but check implementation in simplification tabs.

Another question is whether in filling in the QIS5 is whether we are allowed to take into account actions on matching that we would take when solvency 2 goes into force e.g. currently we are holding matching long term fixed interest securities to match Term liabilties calculated on a solvency 1 basis but under a solvency 2 basis our TPS for term liabilities may be zero or negative! therefore we do not need to hold these FI securities anymore and would invest in asset which gives us the lower market risk SCR , currently if we do the QIS5 market risk interest rate move test on the Term book , there will be no material move in liability (as either zero or negative) whereas there will be a hit on the asset side in interest rate rise shock ?

Potential future hedging transactions are not allowed to be taken into account

Should risks arising from post-employment benefits form part of SCR?

Given the diversity of post employment benefit schemes, CEIOPS does not envisage issuing guidance, although it may be that national guidance in some cases would be desirable.

OECD government debt from outside the EEA now attracts a capital charge.

Not discussed – comment rather than question.

Capital requirement of the interest rate risk module

Following SCR.5.25., the net and gross capital requirement for the interest rate risk module is computed according to the following formulae:

If nMktintUp > nMktintDown then nMktint = max(nMktinUp,0) and Mktint = MktintUp if nMktint >0 and = 0 otherwise

If nMktintDown ≤ nMktintDown then nMktint = max(nMktintDown,0) and Mktint = MktintDown if nMktint >0 and = 0 otherwise.

Firstly, the relation in the third line should read *nMktintUp ≤ nMktintDown*. Secondly, on the one hand, these formulae state that there is a preference for the downwards scenario whenever the net capital requirement under the downwards scenario is equal to the net capital requirement under the upwards scenario. This preference is in line with our assumptions on the interest rate risk but the formulae can lead to a paradoxical situation: Both the net and gross capital requirement for interest rate risk are 0 whenever the net capital requirements in the upwards and downwards scenario are both equal to 0. This is particularly the case when nMktintUp=nMktintDown=MktintDown=0 but MktintUp>0.

Is this behaviour intended?

Probably best to check implementation in spreadsheet. If you feel this is giving rise to distortion this should be commented in response to the qualitative questionnaire.

Interest rate shock calc on Assets
Our understanding is that you first calculate the interest rate reduction based on the liability yield curve and then use this yield reduction to adjust the yield on the assets and hence recalculate the value of the asset e.g. in interest rate up scenario the 15 year year yield is increased by 33% so the liability yield for 15 year liability goes from 4.293% to 1.33 x 4.293 = 5.710% i.e. a yield increase of 1.417% and say asset matching this is a 15 year zero coupon bond yielding 5.0% then you would recalculate the value of this asset using a yield of 5.0% +1.417% = 6.417% vs. increasing the yield by 33% from 5.0% to 6.65% ?

This seems likely to be correct.

Market SCR for new business
In allowing for one year's worth of new business in the SCR, the life-liability and interest-rate shocks (among others) will have an impact, but an immediate fall in equity markets will not; does this mean that the market SCR for new business should ignore equity risk?

See earlier comment to the effect that this will normally be ignored for life business.

Treatment of Pension Surpluses/Deficits in SCR
Assuming you have to bring in current IAS19 surplus or deficit , is it reasonable to assume that no movement can be assumed in the SCR for the Pension Deficits on the basis that management action will be taken and for companies with a Pension Surplus , the Max SCR hit will be equal to the current Pension Surplus.

See earlier comment to the effect that that CEIOPS does not envisage issuing guidance but that national supervisors may do so.

SCR counterparty risk module

whether deposits come under spread risk section or counterparty risk section as it mentions them under spread risk 5.74 and default risk 6.4 . We would have normal short term deposits but we would also have medium term zero coupon deposits for matching our Tracker guarantees , do you treat these differently on whether they fall into spread risk section or counterparty risk section.

CEIOPS explained that spread/concentration risk and counterparty risk are mutually exclusive. In their view the scope of spread risk is clearly defined in terms of assets affected and all other assets fall to be considered in relation to counterparty risk.

I have a specific question in respect of the calculation of the risk mitigating effect of reinsurance (SCR 6.29 p 140). What premium in respect of what time period of risk exposures are we talking about there? It is not specified and not obvious.

In this particular formula, premium is being used simply as a volume measure – for example the annualised premium 'in force' at the valuation date.

Some reinsurance treaties (in particular old ones) will be a liability on a best estimates basis , do we net these against other reinsurance assets ? What do we do for working out Counterparty default SCR for these ?

Netting is allowed.

(SCR 6.15) Probabilities of defaults were provided depending on the Sii ratio for companies not having a credit rating (eg internal reinsurance). How these additional categories should be integrated in the calculation of V (SCR 6.14). Should these be considered as additional rating classes?

One practical solution might be to change the table of SCR 6.16 and create categories of sii ratio's that create pd's similar to the ones based on the rating class, so that each pd can be associated with a rating-class or a range of sii-ratio's.

Answer 33:

Although a different presentation could have lead to using the same probabilities of default in the table in SCR 6.14, and in the table of SCR 6.16, for the QIS 5 exercise, undertakings wanting to test SCR 6.16 for unrated counterparties are nevertheless invited to used the probabilities of default from the table in SCR 6.16 in the application of the formulas as defined in SCR 6.14.

Problem

The answer is not really providing an answer to the question raised. The formulaes in SCR 6.14 are written from the assumption that y_j and z_j and u_{ij} and v_i are calculated per rating class. If a company is in a scenario that some its counterparties are rated and others are not, it will have to rely to the tables in SCR 6.14 and 6.16 to derive the pi from. But how should the formulas y_j and z_j and u_{ij} and v_i be interpreted. Do we have to add each unrated class

(depending on the solvency ratio) as a new rating class for which values of y,z,u and v have to be calculated ?

Review the spreadsheet which specifies a number of classes for unrated counterparties.

(6.29) The method that has to be applied in estimating the capital effect for one individual R/I counterparty is based on individual Line of Business inputs. SCR 6.30 suggests calculating the overall counterparty effect by adding the results of 6.29 (calculated per individual business line) across the Lines of Business.

Assume a counterparty is participating in multiple reinsurance programs that protect both man-made and nat-cat scenario's.   How should the (NLhyp/cat – NLwithout/cat)² be calculated ? If we simply add all the individual calculated Standard Formula Cat scenario's, calculate the effect of the counterparty in these scenario's and use this in the above suggested formula, we take the assumption that all scenario's could occur in the same year.

One suggestion could be to calculate the counterparties share in each individual cat-scenario and then apply the cat correlation structure to obtain a diversified cat loss for the counterparty (which could be allocated proportionally to the individual business lines).

Answer: These additional calculation steps might provide a finer granularity in taking into account the diversification between the cat scenarios, but would introduce too much complexity within the framework of the Standard Formula.

Problem: If this answer is a correct interpretation of SCR 6.30, than it would mean that an insurance company calculating it's counterparty exposure charge for a reinsurance company that is participating in most of its treaties (as is mostly the case with the larger reinsurance companies), will have to assume that in its LGD scenario for the 1/200 scenario, each 1/200 cat scenario the company is exposed to will occur and hence the LGD will be overestimated significantly. I would like to have confirmed that this is really the correct interpretation of SCR 6.30.

CEIOPS did not depart from the answer given in the Q&A, but invited undertakings to comment where this interpretation might in practice prove inappropriate.

SCR Life underwriting risk module

<u>SCR life mortality risk</u>
Is the 15% shock to mortality rates assumed to happen after the valuation date? If so, then the claims provision component of the life Technical Provisions would be unaffected by this shock (which would, arguably, result in an inconsistency between the treatment of reserve uncertainty for life and non-life risks).

The shock is assumed to happen immediately following the valuation date and does not therefore affect provisioning levels at that date.

SCR life catastrophe risk
The 1.5 per mille shock is described as occurring "over the following year". Does it then apply to provisions for outstanding claims (IBNR and RBNS)?

The catastrophe is assumed to happen at a point in time immediately following the valuation.

SCR life lapse risk
The mass lapse shock distinguishes between retail and non-retail business. The definition of non-retail business does not appear to include group/master PPI policies where the policyholder is not a natural person (e.g. is a bank or other credit provider). Is this interpretation correct?

It is not possible to give a categoric answer for all circumstances. Undertakings are expected to consider whether the risk of lapse action by individuals or by group managers is the more significant.

SCR lapse risk
From a German perspective $Lapse_{mass}$ doesn't seems to be a risk at all. Is the approach to measure this risk appropriate? Is it enough just to consider the difference of the surrender value and the best estimate provision?

This comment was noted, but may be more appropriately raised with a national supervisor in the first instance and to provide explanation in the qualitative questionnaire as the formula is EEA-wide and can not be country specific..

Calculation of future SCRs / disability shock
35% to 25% disability SCR shock makes calculation of future SCRs for Calculation of risk margin extremely difficult , is a simplicification allowed to use an average rate and what rate should that be ?

CEIOPS explained clearly the hierarchy of simplifications available in relation to risk margin calculation, of which this would be an example. Undertakings are encouraged to make use of this hierarchy and to be prepared to explain what they have done.

SCR Health underwriting risk

Health CAT shock
Is there any guidance on how to calculate the 3 elements of this shock i.e. Arena , concentration and epidemic ? Will there by any standard Irish statistics available for Arena and concentration calcs ?

Probably best to review the spreadsheet and helper tabs in the first instance.

SCR Non-life underwriting risk

Are requirements in respect of standardised catastrophe scenarios too complex to be feasible?

The spreadsheet and helper tabs will fully address the treatment of catastrophe, but it is open to undertakings to comment on its practicality in terms of data availability.

Written premiums

·   Should written premiums be the premiums paid or the premiums "recognized"?

·   i.e. if the premiums are paid in installments or the premiums are outstanding, should the unpaid premiums be recognized?

·   If yes, then should these "future" premiums be discounted and adjusted for lapses in order to derive the best estimate written premiums?

This question is linked with the issue of contract boundaries and may be a function of national practices. It is not the intention to change the historic definition of written premium.

·   Premium reserves

·   Depreciation

·   Depreciation is not a cash-flow item, however it is an expense that will be incurred in the future and can be partly allocated to the premium reserves

·   Additionally If the calculation of the URR is made considering the historic combined ratios (which is common) then depreciation is probably included

·   This is also the case if the simplification on page 83 which uses the combined ratio is applied

·   Should future depreciation expenses be included in the premium reserves?

·   Is depreciation usually captured in the combined ratio? i.e. is it part of the technical account?

Depreciation has traditionally been included as an element of expenses in financial statements and it is not intended to change this.

· Future premiums

· Do future premiums only refer to premiums for future coverage periods? i.e. do they exclude premiums that relate to the period prior to the balance sheet date that are received after the balance sheet date? (e.g. outstanding premiums, adjustment premiums etc)

Yes

· Non-life premium and reserve risk

· "Present value of net premiums of existing contracts which are expected to be earned after the following year for each LoBs." (ref SCR 9.12)

· Should these premiums also include premiums which relate to the period prior to the balance sheet date if these have not been received yet?

Almost certainly not.

SCR 9.178. Are the premiums that have to be used premiums at the level of the individual line of business, or rather premiums charged for the peril. For example Windstom, hail, flood are mostly covered in the fire premium. Are the charges in the table on page 242 applicable on the total Fire premium or rather to the (risk) premium that can be allocated to the individual peril?

CEIOPS stated that these should be line of business premiums, because the factors were calibrated on this basis.

SCR 9.33 How to treat Marine, Aviation and satellite insurance ?

CEIOPS understands that an arbitrary allocation may be required and asks that undertakings explain what they have done.

Non-life cat risk
- How should we calculate the SCR_NL_Cat when the reinsurance covers multiple companies in our group?

Probably best to review the spreadsheet and helper tabs to see if these answer this particular question.

How are they going to deal with the reinsurance structures in the nat cat piece in any spreadsheet.

This appears to have been addressed in the spreadsheet and helper tabs.

Why are nat cats and premiums in different regional splits - particularly US where the nat cat region is bigger than the premium.

CEIOPS said that there is no particular reason why these should map upon one another either way.

Correlation of countries outside europe?

Not discussed – I suggest reviewing spreadsheet and helper tabs.

Diversification

How should business without an obvious risk territory be assigned to countries (for the geographical diversification calculations). For example, Worldwide Marine business and Space/satellite insurance.

See above – CEIOPS understands that this may have to be an arbitrary allocation, but should be explained.

Non-life catastrophe risk

Inputs required for this module – in particular for man-made catastrophes – are with few exceptions almost impossible to obtain. Insurance companies usually do not keep track of such exposures, at least not in such detail. What is the feedback on this module from participants? Is there any best practice or any advice, how to proceed when required inputs are not available?

See earlier comment – CEIOPS have sought to implement technical specification completely but recognise that undertakings may have data issues.

Should Energy business (offshore and onshore) be included within the non-life natural catastrophe standardised scenarios?

It is not the intention to move away from Solvency 1 LOB definitions (except for Accident and Health).

Should Specie (e.g. fine art insurance) be included within MAT or Miscellaneous? If MAT, should it be included within the non-life natural catastrophe standardised scenarios?

It is not the intention to move away from Solvency 1 LOB definitions (except for Accident and Health). If questions remain, these may be best raised through Q&A.

"SCR.9.12, page 197, SCR nl: Do we have to use the discounted or undiscounted best estimate for claims outstanding for the calculation of the SCR non-life? If we would use the undiscounted best estimate for claims outstanding, there would not be the interest rate risk for the technical part."

Not discussed – this will depend on how the factors have been calibrated.

SCR Undertaking specific parameters

"I did ask this already, but tt´s still not clear: What does "ultimate after one year" mean (page 247)?"

This is the best estimate of the ultimate loss outcome where the estimation is carried out after one year.

Ring-fenced Funds

Financial risk mitigation

Basis risk
Ref SCR 12.14: What level of Basis Risk is "not material"?
Presumably the only way that Basis Risk could be "appropriately reflected in the SCR" is through an Internal Model, as there is nothing else in the Standard Formula? Also, this paragraph implies that you can either fully allow for the risk mitigation or. if there is material basis risk, you cannot allow for it at all. Is there any scope for taking partial allowance for risk mitigation when some basis risk exists?

Materiality is a matter of judgement (see V8 for example) to be exercised by undertakings. The problem with material basis risk is that it may prove to be very volatile and an allowance for hedging is therefore inappropriate. It may be best to raise specific questions through Q&A.

Rolling hedge program
What is a "rolling hedge program" (SCR .12.18) and how does it differ from "Dynamic hedging" (SCR.12.19)? Neither is defined or further explained in the spec.

CEIOPS confirmed that dynamic hedging which depends on being able to execute transactions in the future is not allowed to be taken into account (because the terms of execution may move against the undertaking).

Insurance risk mitigation

Captive simplifications

Participations

What value should be considered in 15.3? Is it the Fair value?

Broadly yes.

What is the definition of strategic participations?

It is expected that undertakings will themselves be able to distinguish between strategic and non-strategic participations – any ambiguities may be raised through Q&A. Undertakings will be asked to explain their definition in response to the qualitative questionnaire.

Internal Model

Minimum Capital Requirement

Are non-life insurance undertakings interpreted to be purely non-life insurance undertakings or composite insurance undertakings? E.g. there are special rules applied to composites when defining MCR.

Composite status is a matter of legal form. As such a composite is distinct from a pure non-life insurer

.

Should the MCR corridor be evaluated by the (partial) internal model, or by the standard formula?

For QIS 5 both.

Own funds

Based on the current QIS5 rules for grandfathering the current sub debt would not be allowed as tier 2 and would fall into Tier 3, this is because it fails the step up rate clause which says that the step up cannot be higher than 100 bps.

This is not a sensible treatment for the sub debt because the step up rate is euribor + 203 bps (vs 5.25% at start which was equivalent to euribor +99bps at start) and currently we could not raise perpetual debt at this level would have to pay about euribor +500bps. So you would have the anomaly whereby the current sub debt which only costs +203 bps to serves is disallowed as Tier 2 whereas new debt which you pay + 500bps to service is allowed , this makes no sense.

The grandfathering step up rule I think is flawed because it does not allow for the current debt market and the fact that there is has been a huge shift in the debt market over the last few years i.e. the cheap credit that was available in the past has gone so any debt raised in the past on the cheap rates is very valuable. The general rule in the Solvency 2 articles is that there should be no moderate incentive to mature the bond , based on current rates there is NO incentive to mature the bonds, therefore we need to seek a change on the grandfathering so that a sensible approach is allowed which allows us to continue to treat the current sub debt as Tier 2 as currently it is not likely that we will ever repay this debt as we would not get cheaper capital anywhere else !

This is a Solvency II rather than QIS 5 issue. QIS 5 does seek to gather extensive data on elements of own funds which will no doubt lead to consideration and discussion of the appropriate criteria for grandfathering various instruments.

Are the calculations envisaged as being required in relation to the expected profits included in future premiums feasible?

As noted earlier, CEIOPS encourages undertakings to address this on a 'best efforts' basis.

Own funds

· Property assets which are (partly) mortgaged

· Does this restriction have any impact? (e.g. in own funds, risks etc)

CEIOPS undertook to give further consideration to this question.

Finnish equalization provision – reconciliation reserve. Handling like in QIS5 National Guidance on treatment of the Swedish restricted reserve called Säkerhetsreserv? I.e. Tier 1 (OF.2.3. / OF.12.) up to the amount mainly covering insurance risks (including also DTL), the remaining part Tier 2?

The Swedish reserve is the subject of approved national guidance. CEIOPS understands that there is a wide variety of analogous restricted reserves and that comprehensive European guidance is not likely to be possible. Treatments may need to be the subject of further Q&A and/or national guidance.

Expected profits included in future premiums (EPIFP): Technical Specification (TS) says that the approach applies equally to life and non-life business (OF.2.4./OF.17.). EPIFP has the connection to the boundary of an existing (re)insurance contract. This new item in QIS5 TS versus QIS5 Draft TS could be clarified more.

See earlier comments.

Considering both TS and Level 1 text, we assume that:
- if Tier 3 = 0, then Max(Tier 2) = 2 x Tier 1; or
- if Tier 3 > 0, then Max(Tier 2 + Tier 3) = 2 x Tier 1.
Could you confirm?

This is effectively answered by the spreadsheet calculation.

Groups

Currency risk for group SCR calculations

For the group SCR calculation, is the correct approach to unwind all the currency risk calculations in each entity and rebase the calculations on the group local currency?

If a related undertaking - which contributes to the Group SCR for 100 millions and has 90 millions of Own Funds - issues 18 millions subordinated debt, then at ultimate parent level is it eligible option 1 or 2?
1. all the amount of 18 millions (up to the contribution to the Group SCR of 100 millions); or
2. an amount of 10 millions (up to the residual part of SCR not already covered by Own Funds: 10 = 100 - 90).

Could you explain what is the meaning of proportional share in G3.1 and G3.2? Is it the percentage of ownership of the related undertaking?

The workshop concentrated on solo issues and these group issues were not discussed. The instructions supporting the completion of the group elements of the QIS 5 spreadsheet is expected to be published 7 September.

Miscellaneous notes from workshop

A number of questions were raised about various forms of dual coverage (for example including life and health coverage) and how to ensure that these are treated coherently. In many cases – if unbundling is not practicable, an arbitrary allocation having regard to the more significant risk driver may be appropriate.

CEIOPS is particularly keen that firms currently valuing illiquid liabilities by reference to the yield on matching assets complete those sections of the spreadsheet which will allow it to assess the impact of various patterns of transitional arrangement.

There appeared to be some ambiguity about the duration measure being sought in relation to illiquid liabilities in various buckets – CEIOPS will clarify this point.

Some assets such as property investments may be structured in the same way as a participation. CEIOPS wants undertakings to address substance over form – if it is a pure property asset then it should be valued and stressed as such.

There was some discussion of whether accepted proportional reinsurance should or should not be distinguished from direct business (the spreadsheet envisages treating it distinctly, The spreadsheet makes the distinction, but it was acknowledged that it may not always be appropriate to require this (if accepted business is relatively immaterial).

The 'Overview' tab in the spreadsheet is of particular importance, as this is where the picture of the overall impact of Solvency II – including impacts on own funds – comes together. The picture conveyed by this tab should be reviewed carefully as it is a good sense check of all spreadsheet inputs.

There appeared to be some ambiguity as regards the treatment of facultative reinsurance in relation to the catastrophe risk calculations. CEIOPS undertook to consider this matter further.

Comments / queries on these notes

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