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# Risk-Based Capital Seminar: Family Takaful Workshop

**Hassan Scott Odierno, FSA**

***Partner***

**Farzana Ismail, FIA**

***Principal***

# Agenda

- Five issues to be discussed in groups
- Discussion of opinions / conclusions
- Checking and using the valuation forms

# Reserving and capital calculations under RBCT

# Key reserving issues

- Financial reporting
- Calculation of risk fund reserve
- Calculation of expense reserve
- Determining FCC
- Determining ECC

# Presentation of financial statements

- **Question 1:**
- How should the accounts of a takaful entity be structured?

**Option 1** — The takaful operators and the takaful fund should have <u>separate financial</u> statements

**Option 2** — The takaful operators and the takaful fund should have <u>combined</u> financial statements

**Option 3** — The takaful operators and the takaful fund should have <u>consolidated</u> financial statements

# Presentation of financial statements

- **Discussion points:**
- In our view, the financial statements for the takaful operator should be presented as separate statements, for the following reasons:
  - Although the Operator has control over the conduct of the takaful business, once key parameters (e.g. contribution rates, wakalah fee, surplus sharing) are determined it cannot change these parameters for long term in-force business.
  - We have seen instances where the operator’s fund shows a surplus but the takaful fund is in deficit.
  - Consolidating will result in a loss of pertinent information about the business.
- However we note that there is merit to an aggregated presentation as separate statements may not reflect the economic relationship between the PRF and SHF.

# Calculation of family takaful reserve

- **Question 2:**
- What should the valuation methodology be for non-linked and non-drip products (PRF and SHF)?

**For non-linked and**
**non-drip products**
**PRF valuation**

→

**Sterling?**
**GPV?**

**SHF valuation**
***Needs to be consistent***
***With PRF valuation***

→

**Sterling?**
**GPV?**

# Calculation of family takaful reserve

- **Discussion points:**
- For investment-linked and drip plans, the requirement to use sterling reserves is clear.
- We note that some players use discounted negative cashflows (which is more onerous) instead of sterling reserves for ease of modelling.
- For non-linked and non-drip plans, the valuation basis is less clear. In our view GPV is acceptable.
- For expense reserve, the guidelines require the use of a valuation method that is consistent with the valuation of family takaful.
- In practice we see companies adopting a single method i.e. all GPV or all sterling/discounted negative cashflows.

# Calculation of expense reserves

- **Question 3:**
- The expense reserves in the operator's fund include surplus from the participants' risk fund.
  - Should risk fund surplus be included in the expense reserve calculations? Do you view risk fund surplus as reasonably certain?
  - Is the surplus before or after capital charges?
  - What is the level of capital allowance to determine surplus to be distributed from the PRF i.e. 100% TCR? 130% TCR?
  - When can the surplus be transferred out – monthly / annually?

# Calculation of expense reserves

- **Question 3:**
- **Discussion points:**
  - Allowing for surplus requires the AA to be certain about surplus arising
  - If surplus is allowed, the regulations seem to imply that allowance for capital is required.
  - This has a significant impact on surplus distribution policy (restricted access to surplus from operator’s viewpoint)
  - No specification that 130% capital is required in the PRF, so is 100% TCR in PRF sufficient (with remainder to be met from SHF)?
  - Based on TOF para 10.22, it seems to imply surplus can only be distributed annually

# Calculation of expense reserves

- **Excerpt from TOF Para 10.22:**
- In the surplus distribution process, takaful operators are required to observe the following requirements:
- a) The surplus to be distributed shall be recommended by the Actuary and endorsed by the Board;……..
- d) **The surplus shall be determined and distributed:**
  - **i) based on full valuation of liabilities as certified by the Actuary and full audited results;**
  - ii) after meeting claims and other outgoes of the fund such as retakaful contributions;
  - iii) after observing any other prudential requirements as may be set by the Bank;

# Calculation of the family takaful reserve and capital under RBCT

- **Question 4(i):**
- For unit-linked plans reserved under GPV basis, reserves are often negative which is then zeroised. Should companies adopt max(UCR, GPV) which then produces a positive reserve as UCR > 0. Is this method appropriate?

- **Discussion points:**
  - We believe that holding a maximum (UCR, GPV) is acceptable
  - Timing allowance on when contribution is received
  - However, not required strictly by the guidelines
  - Note that holding a minimum of UCR is not practiced in the conventional insurance industry
  - Is takaful being overly prudent?

# Calculation of the family takaful reserve and capital under RBCT

- **Question 4(ii):**
- If the method is appropriate, how do we calculate V*-V under RBCT? Assume GPV for V* and V are -50 and -100 respectively and UCR is 20. Which of the following should be V* - V
  - Max(20, -50) – Max (20, -100) = 0
  - Max(20 – 20, -50 –(-100)) = 50
  - Risk factor * (UCR)
  - Alternative method e.g. allowance for unearned tabarru similar to general takaful?
- **Discussion points:**
  - V* - V represent differences in value of liabilities at 99.5$^{th}$ and 75$^{th}$
  - If UCR is already at 99.5$^{th}$ then there is no need to hold capital
  - However, if UCR is not at 99.5$^{th}$, then FCC is required.
  - This will have the effect of overstating CAR however

# Calculation of ECC under RBCT

- **Question 5(i):**
- If a long term product has zero GPV, hence reserved under UCR+IBNR which is a short term reserving basis. If that is the case, how is the ECC calculated – using GPV or short term basis similar to General Takaful ?
- **Discussion points:**
  - We note that the ECC should be calculated on a consistent basis.
  - In our view, we need to consider the liability duration of the underlying product
  - If it is a long term product, then expense reserve should be valued on a long-term basis (even though a max (UCR,GPV) is taken as reserves for the PRF)

# Calculation of ECC under RBCT

- **Question 5 (ii) bullet 1:**
- Personal Accident and Medical products are reserved on a General Takaful basis, as required by the regulations.
  - What if these products have guaranteed renewal feature? Are they then considered long-term or short-term? What basis (family or general takaful) should the ECC be calculated on?
- **Discussion points:**
  - We note short term medical and health products should be reserved on a General Takaful Basis
  - With guaranteed renewal feature, arguably this makes it a long-term product
  - Therefore it is reasonable to determine the expense reserve and ECC on a long term basis.

## Calculation of ECC under RBCT

- **Question 5 (ii) bullet 2:**
  - What should the treatment be if the plan is a rider or a standalone plan since both of these plans have different expense structures?
- **Discussion points:**
  - Should the duration of liabilities be considered?
  - If they are both long-term products, then should the expense reserve and ECC be determined on a long term basis.

# Calculation of ECC under RBCT

- **Question 5 (iii):**
- What about Group Term Takaful? Is it a long term or short term product and how should ECC be calculated (family or general takaful)?
- **Discussion points:**
  - GTT is arguably a short term product
  - Valuation of liabilities should be on a short term basis
  - For the ECC we observed in the industry that although GTT liabilities are valued on a short term basis, ECC is calculated on a long term basis.
  - There is an argument of inconsistency i.e. short term product but expense reserve and ECC valued on a long term basis
  - Strictly, the expense reserve and ECC should be determined on a short term basis.
  - However we note that in a company, expense is usually considered on an aggregate basis.

# Checking and using the reporting forms

# Reporting forms

- Reporting requirements have increased
- Companies are required to report results by sub-risk fund
- In general, the RBCT forms (actuarial) are relatively straightforward to complete
- The forms can be useful for management and finance team to understand the business
  - E.g. Analysis of surplus

# Results Analysis – Risk Fund

In order to check the results in the forms, external analysis will be required. Some sample analysis factors as below can be performed in order to check for consistency and identify any abnormal pattern in the results as compared to prior period results.

| Risk Fund Components in the RBCT forms |
|---|
| PV Benefits @ BE |
| PV Expenses @ BE |
| PV Tabarru' @ BE |
| BE Provisions |
| PRAD |
| Gross Provisions Before Zerorisation ("Gross VR") |
| Family Takaful Risk Capital Charge ("FCC") |

Sample factors for analysis:

- PV Tabarru' / Sum Covered
- PV Benefits / Sum Covered
- Risk Fund Liability @ BE / Sum Covered
- PRAD / BE Liability
- FCC / PRAD

# Results Analysis – Shareholders' Fund

| Shareholders' Fund Components in the RBCT forms |
|---|
| PV Operating Costs @ BE |
| PV Wakalah Fees @ BE |
| PV Remuneration from PIF @ BE |
| PV Other Income @ BE |
| BE Provisions |
| PRAD |
| Gross Provisions Before Zerorisation ("Gross VR") |
| Expense Risk Capital Charge ("ECC") |

Sample factors for analysis:

- PV Wakalah Fee / Annual Contribution
- PV Remuneration from PIF / PIF Fund Value
- PV of Expenses / NOP
- PV of Expenses / annual contribution
- PRAD / Gross VR
- ECC / PRAD

# Conclusions

# Conclusion

- There is a move from combined to consolidated accounting basis. Is this appropriate for takaful?
- There is a lack of clarity in certain aspects of the valuation of liabilities and RBCT
- Arguably nature of principle-based regulations – the regulations are subject to interpretation?
- The requirement to report results by each sub-risk funds has resulted in companies merging the sub-risk funds to reduce reporting requirements
- Although the reporting requirements can be onerous, the forms can be useful to understand the business
  - E.g. analysis of surplus
- There are various checks that can be performed to determine that the results are reasonable

# Questions?

**Actual Partners Consulting Sdn Bhd**

**Suite 17.02 Kenanga International**

**Jalan Sultan Ismail**

**50250 Kuala Lumpur**

**Tel +60 3 21610433  Fax +60 3 21613595**

**www.actuarialpartners.com**