

November 7, 2016

Ms. Anne-Marie Beaudoin  
Corporate Secretary  
Autorité des marchés financiers (AMF)  
800, square Victoria, Montréal (Québec) H4Z 1G3

**Re: Capital Adequacy Requirement guideline – Segregated Fund Risks**

Dear Ms. Beaudoin,

The Canadian Institute of Actuaries (CIA) is the national organization and voice of the actuarial profession. The Institute is dedicated to serving the public through the provision, by the profession's 4900+ members, of actuarial services and advice of the highest quality. In fact, the Institute holds the duty of the profession to the public above the needs of the profession and its members.

This letter is in response to the AMF's request for feedback in respect of the segregated fund guarantee risk component of the draft Capital Adequacy Guideline as published on the AMF website on September 15, 2016. This response summarizes the feedback provided by a working group of the CIA Committee on Risk Management and Capital Requirements (CRMCR), including Marco Fillion (Chair), Hélène Baril, and Pierre-Alexandre Veilleux. We apologize for the lateness of this submission, but felt that it would still be helpful for the AMF to be aware of our comments.

Our comments are founded on principled considerations and expert judgment; we did not have sufficient time to perform in-depth analysis to support our comments or measure the effect of the AMF's proposals or our suggestions.

Overall, we feel that the new quantitative approach introduced in the proposed guideline is more robust as it considers risks related to segregated fund guarantees more comprehensively, particularly the risk mitigation strategies insurers have in place. We also support the addition of validation, surveillance, and governance requirements to the Capital Adequacy Guideline. However, we believe that a simpler and more principle-based approach for these requirements would be as efficient, yet more practical. The working group's main concerns relate to the following:

1. In the new quantitative approach, we support the use of a single set of calibration criteria for equity. A single set of calibration criteria is seen as more appropriate from a risk management perspective, as equity risk is not defined by a particular time period in which sales are made. We also support a consistent set of calibration criteria between the AMF and Office of the Superintendent of Financial Institutions (OSFI). However, the working group feels that these calibration criteria are overly conservative. We suggest the AMF work with OSFI to consider adopting the CIA calibration criteria. The CIA would be willing to assist in this exercise. We believe the calibration criteria promulgated by the CIA would be

a more appropriate basis, as they are based on all available credible data about the main equity indices, are regularly updated, and lead to a level of conservatism that is more in line with the Exigences de suffisance du capital en assurance de personnes (ESCAP).

2. The discount rate in the new quantitative approach is based on the “insurer’s investments in terms of the underlying assets that back the segregated funds’ TGCR [total gross capital required]”. The working group believes that segregated fund capital requirements should be independent of the assets that back them, because it would ensure that there is a consistency in the requirements between two insurers with identical segregated fund blocks (regardless of their investment strategies), that capital requirements are not reduced by the use of riskier assets, and that the treatment of segregated funds is consistent with that of other products in the ESCAP. The working group believes that using the ESCAP discount rate would be preferable to increase consistency with the ESCAP.
3. In the proposed guideline, the new quantitative approach prescribes conservative lapse assumptions for products with guaranteed withdrawal benefits and products with in-the-money maturity guarantees. The working group recognizes that relevant experience is scarce in the withdrawal period of guaranteed withdrawal benefits products. However, the working group notes that prescribing a lapse assumption from the beginning of the withdrawal period ignores emerging experience, whether from internal or industry studies. The working group believes that an approach in which insurers can use their credible experience as it emerges, then grading to a prescribed assumption later in the withdrawal period, would be preferable.
4. The working group questions the size of the operational risk components in the new quantitative approach. We recognize that segregated funds with guarantees have more operational risks, such as model risk, than mutual funds or segregated funds without guarantees. However, the rigour asked by the AMF in obtaining and maintaining an approved internal model seems to significantly mitigate the additional model risk. Moreover, in the ESCAP, the operational risk component related to business volume is calculated by applying a 0.4 percent factor to the total segregated funds account value, with no additional factor for hedged contracts. Although there are no quantitative approaches that recognize hedging strategies for determining segregated funds capital requirements in the ESCAP, insurers are still exposed to the operational risk related to hedging. Therefore, the working group believes that the 0.4 percent charge in the ESCAP leads to an operational risk component that, in aggregate, covers both the risk related with segregated funds and hedging. We therefore question the need for an additional 0.4 percent charge for hedged contracts.
5. The AMF has added very exhaustive validation, surveillance, and governance requirements in the proposed guideline. The working group notes that OSFI also has instructions related to the use of internal models for segregated funds<sup>1</sup>. When comparing the requirements, the working group makes the following observations:

---

<sup>1</sup> “Use of Internal Models for Determining Required Capital for Segregated Fund Risks (MCCSR)”

- a. The AMF provides more detailed requirements than OSFI in many respects, including, among others, documentation;
- b. The requirements put forward by OSFI seem to efficiently cover the aspects that the AMF aims to cover, but using a more principle-based than rule-based approach (see, for example, section 7: internal audit of OSFI's instruction guide);
- c. The expectations placed upon each party seem to be more clearly stated in OSFI's instructions; and
- d. The board's responsibilities stated in OSFI's instructions seem more in line with a board's role, which is to "[supervise] the tasks carried out by senior management", as per the AMF's governance guideline.

The working group appreciates the level of detail in the AMF guideline, as it helps in establishing the AMF's exact expectations with regards to the use of an internal model. However, we believe that in this context, a principle-based approach is preferable, and that simpler requirements in line with OSFI's would lead to a clearer and less burdensome process without undermining the quality of the validation, surveillance, and governance processes.

6. The working group considers that the requirements for material changes described in section 6.2.9.4 are onerous in some instances and believes that the AMF should narrow the definition of material changes. In particular, we believe that disclosure of normal assumption updates (updates to reflect developing experience and changes in market variables) to senior management and to the AMF is sufficient, and that these assumptions changes should only be subject to the reporting requirements for non-material changes.
7. The working group notes that with the addition of the new quantitative approach, the proposed Capital Adequacy Guideline contains two internal model approaches (sections 6.2.7 and 6.2.8), which may lead to situations where two insurers with similar segregated fund guarantee risks have different capital requirements. Moreover, the current approach (6.2.7) could lead to lower capital requirements, which would be inappropriate. The working group believes that having two internal model approaches is undesirable.

The balance of this letter provides more detailed feedback and requests for clarifications on specific requirements in the order they appear in the instructions.

- 1) In section 6.2.1.1, under "implementation plan", we suggest replacing "if required" with "if applicable" in points 1 and 2.
- 2) In section 6.2.2, the AMF asks that documentation "be sufficient to allow an independent expert (internal or external) to replicate [...] the results obtained". The working group would like clarification on the extent of the replication the AMF expects. For example, should the independent expert be able to replicate results from scratch or using the insurer's tools? Should the independent expert be able to materially or exactly replicate results?
- 3) In section 6.2.8.6, the AMF splits in steps 4 and 5 the impact of the mortality and the mortality improvement assumptions. The working group questions whether it would be more appropriate that components be related to products sensitive to longevity risk and to mortality

risk rather than components being related to mortality and mortality improvement assumptions. The working group believes that the same number of calculation steps would be required, but that the calculation of components would have to be slightly revised.

Yours truly,

A handwritten signature in cursive script that reads "Dave Dickson".

Dave Dickson  
CIA President