January 26, 2024

Rachel Hemphill
Chair, NAIC Life Actuarial (A) Task Force
National Association of Insurance Commissioners

Re: APF 2023-13

Dear Chair Hemphill,

Thank you for the opportunity to comment on APF 2023-13.

I believe that the conceptual changes proposed in the APF (i.e., the ability to use more relevant and appropriate mortality assumptions for non-US business) are consistent with valuation principles and would enhance reserving. However, I would like to submit some scope and technical / wording questions for your consideration.

**Scope Questions**

What is the intended scope of the APF?

- The APF modifies both Sections 1 and 2 of VM-M, so it seems to be attempting to address all prescribed mortality assumptions in VM-20 – i.e., both Net Premium Reserve (NPR) mortality and the industry tables used to derive Deterministic Reserve (DR) and Stochastic Reserve (SR) mortality assumptions.

  However, VM-20 NPR requirements specifically reference VM-M Section 1.G and 1.H, so VM-20 would need to be amended to reference the new VM-M Section 1.N (or VM-M Section 1, more broadly) to implement the new non-US mortality provision.

  It seems that VM-20, Section 9.C.3 may already allow some modifications to DR/SR mortality for non-US business, but this APF extends the modifications beyond industry tables by allowing for company experience. It may be helpful to add clarifying language or a guidance note to VM-20 for this change. (E.g., Editing VM-20, Section 9.C.3.a to reference VM-2 Section 2.C ("The industry basic table shall be based on the most recent VBT listed in VM-M Section 2 *or VM-M Section 2.C (if applicable)*….") or to note in either VM-20, Section 9.C.3.f or a new guidance note that for non-US business, modifications in VM-M Section 2.C may also be applied.)

  - VM-20, Section 9.C.3.f: "If no industry basic table appropriately reflects the risk characteristics of the mortality segment, the company may use any well-established industry table that is based on the experience of policies having the appropriate risk characteristics in lieu of an industry basic table."

- VM-20, Section 9.C.3.b: "A modified industry basic table is permitted in a limited number of situations where an industry basic table does not appropriately reflect the expected mortality experience, such as joint life mortality, simplified underwriting, or substandard or rated lives. In cases other than modification of the table to reflect joint life mortality, the modification must not result in mortality rates lower than those in the industry basic table without approval by the insurance commissioner."

- While the APF adds selected annuity tables, I believe VM-M is currently used by only VM-20, so the APF, as written, would only affect life products. However, reflecting the most relevant assumptions for non-US business seems conceptually appropriate for *all products*. For example:

  - VM-22 with the 1994 GAR table (one of the tables added by the APF) is used for non-US pension risk transfer and longevity business. Does this APF contemplate non-US mortality provisions for existing VM-22 formulaic reserves and/or future VM-22 principle-based reserves (PBR)?

  - The 2012 IAM Basic Mortality Table is not included in the APF, but its use in the VM-21 Standard Projection and for stochastic reserve mortality assumption development when company experience is limited may or may not be appropriate for non-US business (although non-US business valued under VM-21 may currently be immaterial).

  - Non-US considerations may extend beyond mortality assumptions – e.g., prescribed assumptions for non-US disability benefits.

**Technical / Wording Questions**

- The APF states that the company "may" use mortality for the country of residence. Does this provide companies with the option to use US or country-specific tables, and is this primarily intended to avoid requiring non-US mortality (and extra work) if non-US mortality is more favorable than prescribed US mortality or for immaterial differences (e.g., immaterial mortality differences or immaterial block)?

  Note:
  - VM-20 Section 3.C.1.g for NPR already requires adjustments if anticipated experience exceeds the US CSO table (although there may be some ambiguity if non-US anticipated experience is less than US CSO but the relevant non-US industry table with appropriate margins exceeds US CSO).
  - In contrast, if this APF applies to formulaic (non-PBR) reserves, there would not be an existing requirement to adjust prescribed mortality when non-US experience is less favorable.

- VM-M Sections 1 and 2 use different language to describe when companies may develop their own mortality table and margin requirements. Is that intentional? (Do the requirements for NPR mortality and DR/SR mortality blending differ, and if so, is that necessary?)

- Section 1 allows the company to develop its own table "in the *absence* of an industry table" while Section 2 allows for the development of a table "if a *relevant* industry table is not available."

- Section 1 requires "margins consistent with the purpose of US statutory reserve methods" while Section 2 requires margins "equivalent to the difference between the company's anticipated mortality for US business and the VBT table used for its US business."

Allowing a company to develop non-US assumptions in the absence of a *relevant* industry table (i.e., the Section 2 language) seems conceptually preferable. A non-US industry table may exist but still not be appropriate due to material population differences. In jurisdictions that rely on modeled reserves with company-specific assumptions, there may be industry *reference* tables that are designed to be modified based on the characteristics of the business and anticipated experience – e.g., X% of the industry reference table. Section 1 might be interpreted as requiring the use of 100% of the industry table in both cases because *an industry table exists*.

For margins, Section 1's emphasis on "consistency" may be clearer. Depending on the interpretation of the word "equivalent," a literal reading of Section 2 might suggest taking margins directly from the company's US business (i.e., VBT - Anticipated Experience for a US block). However, developing margins according to the same *underlying principles and considerations* as US margins for each specific purpose (i.e., CSO valuation table for Section 1, best estimate / basic table for Section 2) would be more appropriate than directly using US values since US and non-US blocks may have very different target markets, types / levels of underwriting, and different levels of credibility (e.g., large US block with decades of experience vs. tiny, new non-US block). (As a practical matter, the company may not even have a US block for the particular product, or the exact numerical difference between the VBT and anticipated experience may differ across their various US blocks.)

Thank you for your consideration, and please let me know if you have any questions.

Sincerely,
Connie Tang