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NAIC Variable Annuity Reform—A Current Primer

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In recent years, the use of on-shore and off-shore captive reinsurance transactions by a number of U.S. variable annuity (VA) companies—seen as a direct consequence of the complexity of the current U.S. statutory framework—motivated the National Association of Insurance Commissioners (NAIC) to determine what changes may be needed to encourage companies to recapture this business. This article provides a high-level overview of the proposed changes to the existing regulatory guidelines, the current status of the reform process, and a brief evaluation of the changes, including potential key drivers of differences in results.

BACKGROUND AND OVERVIEW OF THE PROPOSED FRAMEWORK

In early December 2017, NAIC released proposed revisions to the existing U.S. variable annuity statutory framework. These revisions were promulgated as redline updates to the existing Actuarial Guideline 43 (AG 43) and Risk Based Capital (RBC) C3 Phase II (C3P2) instructions and were the culmination of two rounds of field testing (quantitative impact studies, QIS) performed by Oliver Wyman and industry participants in 2016 and 2017 that provided much of the impetus behind the specific changes. The QIS testing itself was motivated by the industry perception that the use of captives by many variable annuity writers was a direct result of the complexity of AG 43 and C3P2. The NAIC commissioned the QIS initiative to address these concerns, to promote stronger risk management, and to consider what changes may encourage companies to recapture this business.

The NAIC proposed revisions were exposed for comment in the first quarter of 2018, which allowed industry participants, regulators and interested parties to fully absorb the redline documents. An NAIC variable annuity reform meeting on May 16, 2018, also provided a forum to render comments and feedback in person.

In late July 2018, the NAIC Variable Annuity Issues (E) Working Group (VAIWG) adopted almost all of the broad recommended changes outlined in the November 2017 AG 43 and C3P2 redline documents that were exposed for public comment, although a number of the recommendations were modestly adjusted and one recommendation was rejected (the recommendation to increase the admissibility limit for deferred tax assets pertaining to variable annuity business).

Under the new framework, the aggregate reserve is now the sum of the conditional tail expectation (CTE) Amount and the additional Standard Projection Amount, where the latter term is determined using the Standard Projection (formerly known as the Standard Scenario). While a complete description of all these components is outside the scope of this article, Figures 1 through 3 provide an overview of the proposed framework and that of the CTE Amount and the Standard Projection Amount.

Figure 1
Proposed Statutory Framework—Overview

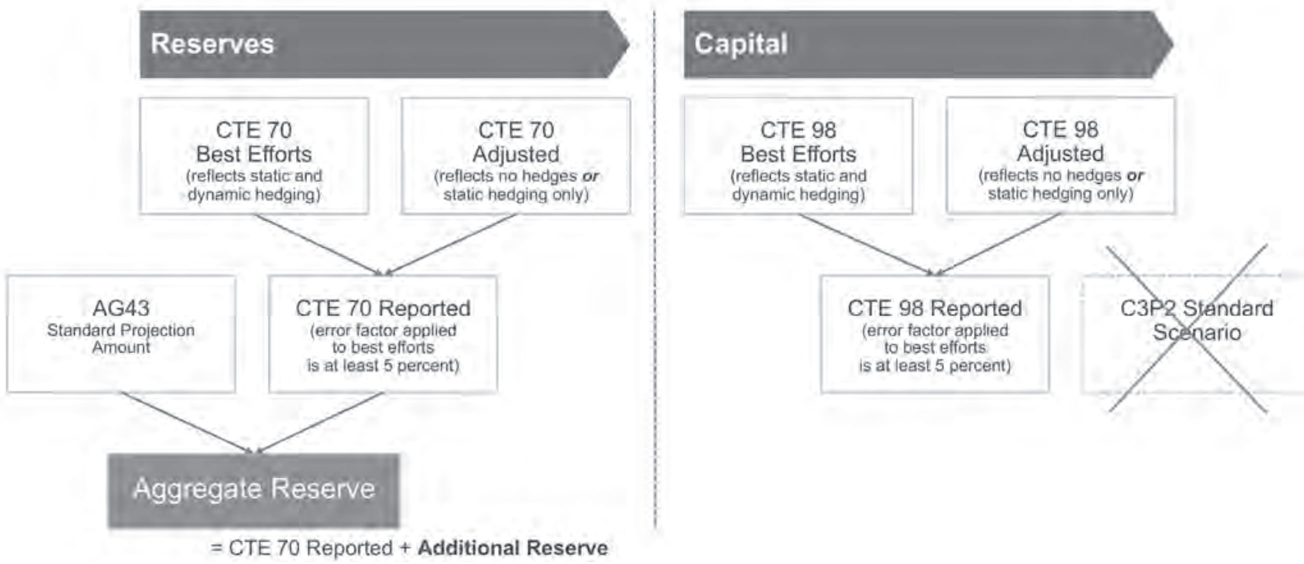


Figure 2
Proposed Statutory Framework—Overview on the CTE Amount

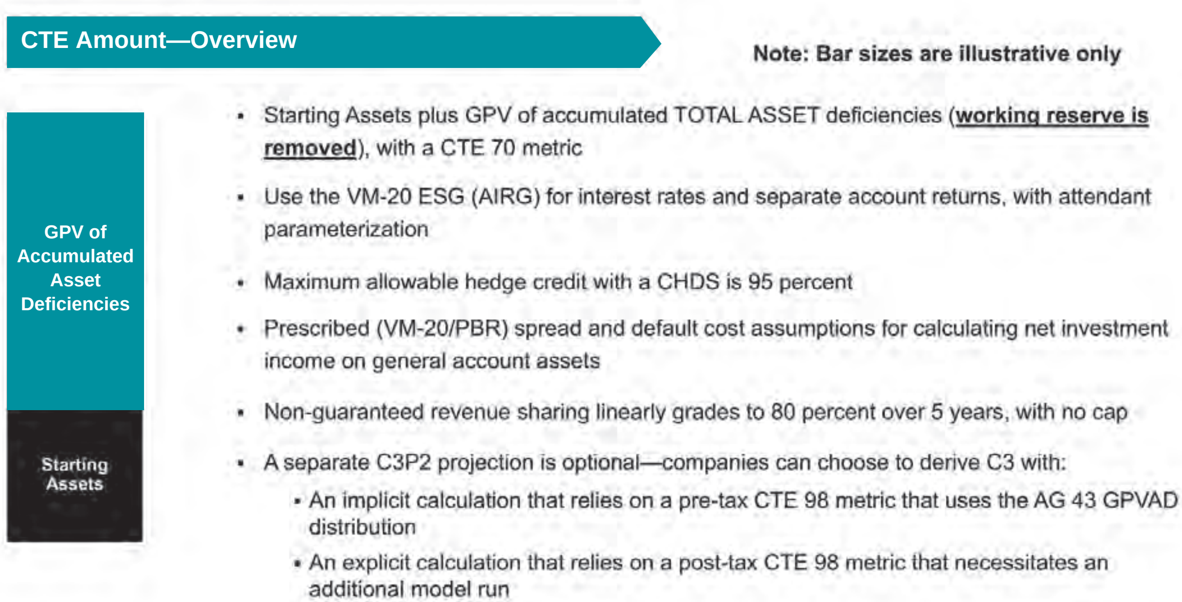
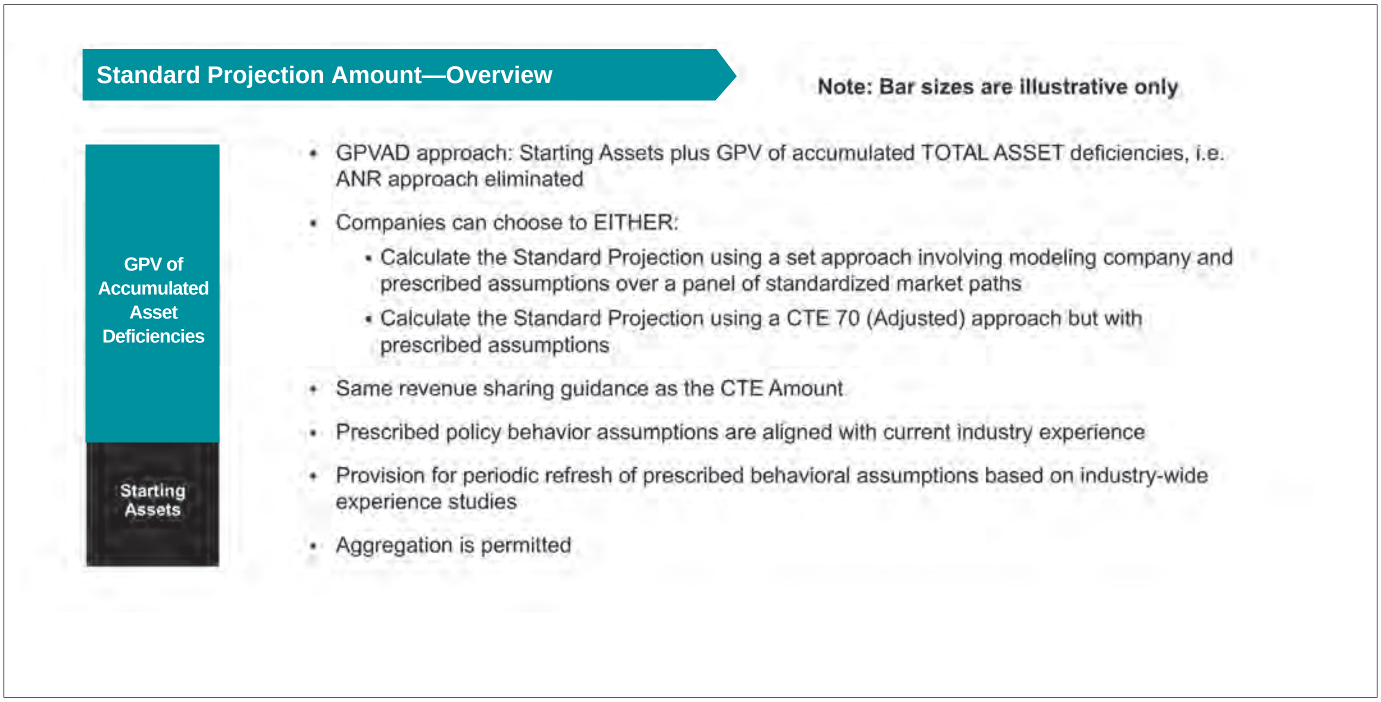


Figure 3
Proposed Statutory Framework—Overview of the Standard Projection Amount



KEY RECENT REVISIONS

At a high level, the main revisions in what the VAIWG adopted relative to the November 2017 redline documents include changes to the following:

RBC C3 Charge

- Modification of the calculation to use a CTE 98 metric (rather than a CTE 95).
- This follows from the VAIWG decision to not recalibrate the VM-20 scenario generator with 1926-2016 data.

Standard Projection

- In three years, the industry will re-evaluate the stipulation that the necessity of the Standard Projection as a binding element of the calculation (rather than simply a disclosure item).
- Removing the need for companies to obtain regulatory approval if choosing to calculate the Standard Projection using a CTE 70 Amount (Adjusted) approach with prescribed actuarial assumptions.
- Regulatory approval is still required to switch between this approach and the approach that relies on standardized market paths and both company and prescribed assumptions.

Other

- Removal of the affiliated/nonaffiliated distinction for nonguaranteed net revenue sharing income.
- Modifications to a number of disclosure requirements needed for the actuarial memorandum.

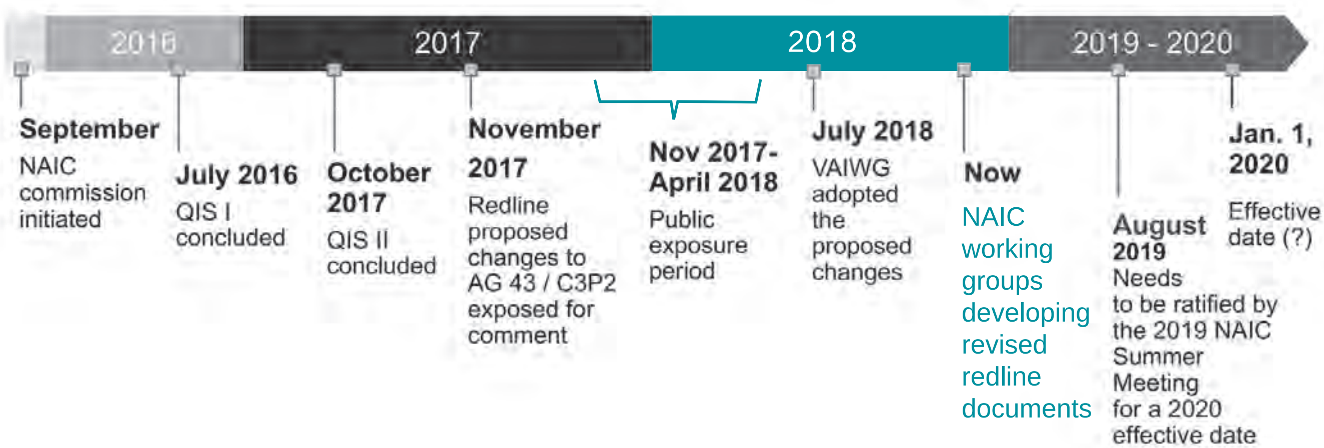
CURRENT STATUS

While NAIC has agreed upon the above revisions, these revisions have not yet been incorporated into a formal rewrite of the November 2017 redline documents. At the current time, implementation assignments to formally update said documents (in other words, to create a final set of regulatory instructions for AG 43 and, by extension, VM-21 of the Statutory Valuation Manual) have been assigned to the appropriate NAIC working groups and task forces.

New updated redlines will be exposed publicly piecemeal—the entire set will undergo review by the Life Actuarial (A) Task Force and Life Risk-Based Capital (E) Working Group, possibly in early 2019.

A timeline of the entire NAIC VA reform process is provided in Figure 4.

Figure 4
NAIC VA Reform Timeline



While the effective date in the final set of regulatory instructions is anticipated to be for valuation dates subsequent to Jan. 1, 2020, for this to occur, all technical wording changes to the instructions need to be approved at the highest level of the NAIC by the Summer Meeting that is to take place in early August 2019.

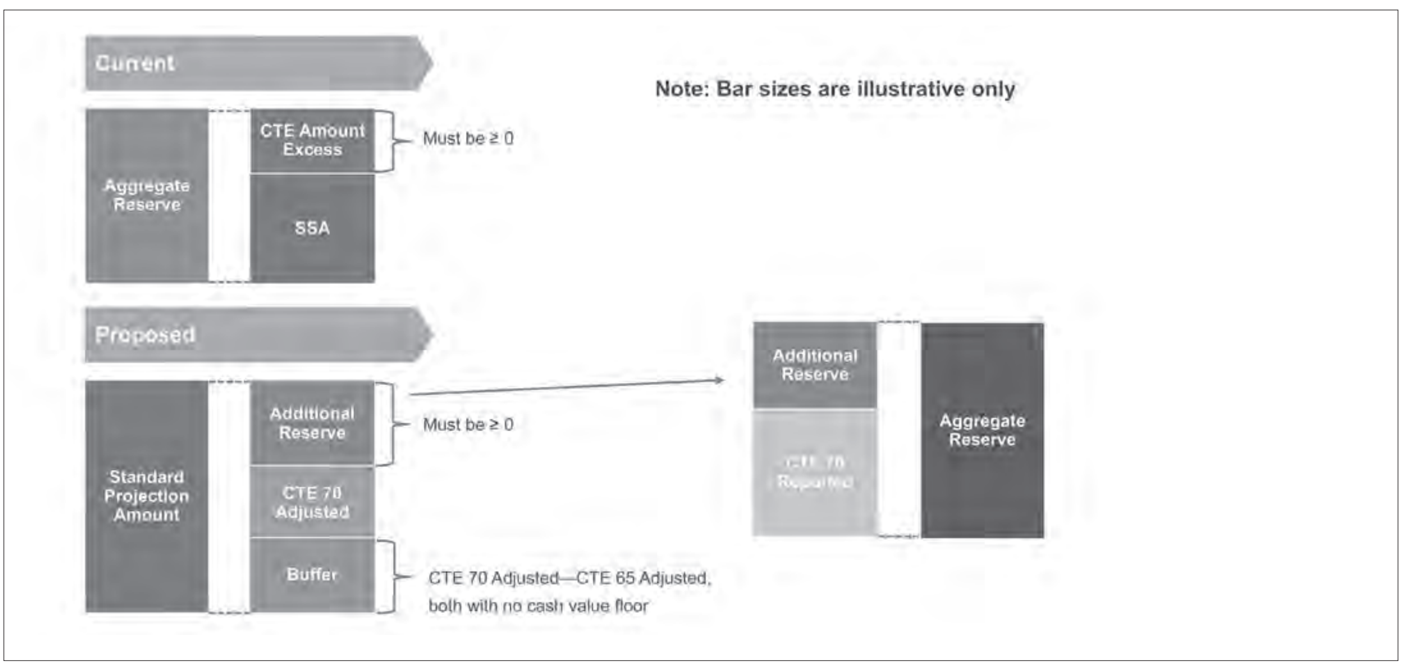
Should this date be missed, it is not clear whether the Jan. 1, 2020, date will be revised. Note that companies can also choose to apply these changes for the valuation on Dec. 31, 2019.

While the new framework applies to all existing variable annuity business as of the effective date and any business issued thereafter, the final set of regulatory instructions has provision for an optional phase-in or grading of the new statutory framework over a three-year period, with a longer phase-in period (potentially up to seven years) allowed subject to regulatory approval. The grading may also be terminated prior to the end of the declared phase-in period, with the full statutory reserve under the new framework applying in such cases.

A HIGH-LEVEL EVALUATION OF THE PROPOSED FRAMEWORK

Figure 5 compares the building blocks for both the current (i.e., status quo) and proposed statutory reserving frameworks.

Figure 5
Comparison of Statutory Frameworks



Note that the additional reserve, defined to be the Standard Projection Amount less the CTE 70 (Adjusted) less a "Buffer" amount, must be nonnegative.

The following are potential positives associated with the proposed framework:

- Aligning the Standard Projection Amount with the CTE Amount as a greatest present value of accumulated asset deficiencies calculation, with aggregation permitted.
- Removing the C3P2 Standard Scenario (which was usually never binding for companies) and ironing out inconsistencies between the current reserving and capital frameworks for the stochastic calculation.
- Encouraging hedging through removal of the working reserve, potentially higher hedge credits and more favorable statutory hedge accounting treatment.
- Aligning the asset assumptions for general account modeling with that used in VM-20.
- Aligning the economic scenario generator for separate account returns and interest rates with that used in VM-20.
- Reducing noneconomic volatility in the RBC ratio and the impact of voluntary reserves (both through modification of the C3 capital charge formula).

The following are potential risks and/or difficulties associated with the proposed framework:

- The complexity of the Withdrawal Delay Cohort Method under the Standard Projection and the potential increase in run-time that may result. (A full-blown approach that is consistent with the instructions can result in liability in-force record counts increasing by a factor of six to 10, which can be challenging from a run-time perspective).
- Forecasting future statutory reserve amounts, as would be required under a pricing or business plan projection, due to the increased complexity of the Standard Projection.
- Determining the greatest actuarial present value at every time step under the Standard Projection.
- Consideration of the asset assumptions for general account modeling for those companies that have not previously explicitly modeled general account assets from first principles.
- Should the "nondefault" methodology be chosen in any specific area where choice is allowed (e.g., modeling the CTE 70 Amount Adjusted with prescribed assumptions for the Standard Projection), there is an added burden of calculating reserve requirements under the default methodology as a disclosure requirement.
- Additional disclosure requirements around the Standard Projection, CTE Amount and hedging.

OBSERVATIONS AND DRIVERS OF POTENTIAL DIFFERENCES IN RESULTS

For practitioners, specific items that may impact results relative to the current statutory framework include the following:

- Using an economic scenario generator (and underlying parameters) different to the VM-20 economic scenario generator. For example, some companies may be using a mean reversion assumption for interest rates that is materially different to that used in the VM-20 generator (both the target mean reversion and the "speed of reversion," or time horizon over which interest rates revert to said target).
- Company policyholder behavior assumptions relative to the prescribed policyholder behavior assumptions for the Standard Projection.
- Using assumptions for general account asset modeling different to the prescribed VM-20 assumptions.
- The choice of methodology that is inherent within certain aspects of the new framework.

With respect to the last bullet, particularly important examples of choices in methodology include the formulation of the Standard Projection Amount—as either using a hybrid approach with both company and prescribed assumptions over a panel of standardized paths or a CTE 70 Amount (Adjusted) calculation with prescribed assumptions—and potential simplifications to the approach used to apply the Withdrawal Delay Cohort Method, particularly with regard to discarding cohorts. Modeling the Withdrawal Delay Cohort Method according to the instructions may require a significant effort and can be operationally challenging[1].

Another example of choice includes the approach to the RBC C3 charge calculation, for which companies can either choose to use an implicit approach (leveraging the distribution of AG 43 results, with a subsequent tax adjustment) or an explicit approach (that requires a separate model run with taxes included).

CONCLUSIONS

Despite the final set of regulatory instructions not being ready until early 2019, companies can use the existing November 2017 redline documents as a comprehensive starting point. Accordingly, with the effective date of the new statutory framework potentially on Jan. 1, 2020 (assuming ratification of the final set of regulatory instructions at the 2019 NAIC Summer Meeting) and given the scope/breadth of changes, it is critical that companies devote sufficient preparation time to:

- Implement model modifications to reflect the new framework.
- Perform impact testing of the new framework.
- Make decisions around areas of the requirements that allow a choice of methodology, as outlined above (with said decisions made on the basis of computational tractability and/or financial impact).
- Allow for peer review, independent validation and regression testing.
- Consider the additional disclosure items that are required in support of the Standard Projection and hedging.

It is also important for companies to carry out the above in order to provide context in discussions with third parties, such as auditors, regulators, rating agencies and/or reinsurance companies, with respect to chosen methodologies and the financial impact of the changes. ■

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ENDNOTE

1 While the instructions allow for discarding some cohorts, companies may also wish to test the impact of removing cohorts associated with off-risk ages, stipulating a maximum number of cohorts or other reasonable simplifications that do not materially impact results.