

**CANADIAN VISION FOR
PROPERTY AND CASUALTY INSURER
SOLVENCY ASSESSMENT**

MCT ADVISORY COMMITTEE

DECEMBER 2011

THE PUBLIC UTILITIES BOARD
Exhibit No. PUB #18
Re: MPI GRA 2017
10/18/16 D. Phillips
DATE SECRETARY

assessment of the ability and accountability of an insurer in operating effective risk management. Sufficient skilled and competent resources dedicated to the modeling function are a prerequisite of an internal capital model approach.

Regulators will establish standards for the approval and use of internal models, including but not limited to:

- Appropriateness of model
- Risk management and control standards
- Data quality
- Extent to which model is used to run the business (use test)
- Minimum quantitative standards

Refer to Appendix 2 for more information regarding governance and market conduct.

This principles-based solvency framework is not dependent on the current Canadian financial reporting regime and will apply regardless of the ultimate direction of Canadian accounting standards.

Regulatory Target and Minimum Requirements

The regulators will maintain a standardized test like the current Minimum Capital Test (MCT) and Branch Adequacy of Assets Test (BAAT) for insurers that choose not to or are unable to develop internal models. These tests may need to be adjusted once experience from the more advanced approaches is available to maintain the industry's competitive balance.

Those insurers that choose to develop models will calculate their regulatory asset requirement on two bases, at a target level (i.e., regulatory target asset requirement or TAR) and at a minimum level (i.e., regulatory minimum asset requirement or MAR).

The MAR is the level at which the regulator is expected to take control of the insurer or to take other appropriate action. Of course, the regulator is not precluded from earlier intervention if, in the judgment of the regulator, such action is warranted. The MAR will be determined according to the same core principles as the standard approach TAR (note that, even for internal models users, MAR will also use the standardized approach).

Under a TAR approach, required capital will be the amount remaining when the liabilities are deducted from the respective asset requirement. The amount of liabilities that can offset required assets, whether at the minimum, supervisory target or company target levels and whether under the standard or the internal models approach, will be capped by an amount that is linked to the calculation of required assets. The cap will be defined by the regulators.

The cap will be defined in a way that encourages companies to set liabilities at prudent levels and have appropriate levels of capital and it is expected that the cap would be reached on an exceptional basis only.

Capital and capital ratios will continue to be used in the supervisory process to assess a company's solvency and make decisions on the appropriate level of intervention.

Regulators will set the TAR at a high confidence level representative of a threshold for good quality investment grade securities¹. As its working hypothesis, the P&C MAC is using, over a 1 year horizon, either a Value at Risk (VaR) with a confidence level of 99.5% or a Tail Value at Risk (TVaR) with a confidence level of 99%. That confidence level at which the risk measure is to be applied will be confirmed at a later date following future calibration and will be finalized in a way that ensures the resulting capital and asset levels are appropriate overall, as well as for individual risks and products.

Insurers will likely choose to manage their business to higher levels of confidence than TAR to achieve strength levels desired by their stakeholders.

For a company with approval to use internal models, the supervisory target capital requirement will not be expected to decrease by an amount greater than a regulator-defined level, when compared to the supervisory target capital requirement under the standard approach.

Internal model and Standard Approaches

The most sophisticated method of calculating the TAR is the internal model approach which uses scenario modeling integrated with the insurer's risk management process. The internal model approach requires the modeling of an insurer's risks including the risk mitigation strategies (i.e. the manner in which the risks are managed) used by the insurer and the risk dependencies (e.g. the manner in which different types of risks interact with each other) within, as well as between, the insurer's key risk types under normal and stress situations. Dependencies between risks will be included only to the extent that they can be evaluated in a robust manner.

The regulators expect senior management and risk officers of companies with approval to use an internal model to determine regulatory capital requirements to understand and manage the underlying risk, ensure the ongoing integrity of the model and be proactive in the management of capital.

The internal model approach should be developed, subject to insurers meeting regulatory defined parameters for the various risk categories, with freedom to choose some but not necessarily all model inputs, and with both quantitative and qualitative conditions around the inputs. Generally, standardized assumptions should be used where they are not dependent on company-specific circumstances.

While the internal model approach is sophisticated, its results must be understandable and verifiable. The use of the internal model approach to determine TAR requires prior regulatory approval. The internal model approach will be made available only to those insurers that can demonstrate that they have robust controls in place and that they meet minimum standards set by the regulators.

¹ The target investment grade level of quality will be determined later.