Guidance on Advanced Approaches GAA 2014-02: Guidance Relating to Notifications of Material Changes to Advanced Systems and Modeling Changes

This guidance summarizes supervisory expectations for when and how a banking organization should notify supervisors of material changes to its advanced systems or modeling assumptions (referred to as "model changes") under the advanced approaches risk-based capital rule (rule).[1] This guidance applies to all model changes that could have a material impact on risk-weighted assets (RWA) for the overall banking organization or for any exposure type. Staff members at the Office of the Comptroller of the Currency (OCC) and the Board of Governors of the Federal Reserve System (Board) worked closely to develop this guidance.

Background

The existing supervisory guidance on model risk management (Board SR letter 11-7 and OCC Bulletin 2011-12) emphasizes the importance of appropriate governance policies and controls over a banking organization's model risk management framework, including systematic processes with appropriate senior management overseeing model changes over time.[2] For models used in calculating regulatory capital requirements, effective model risk management also entails coordinating model changes with the Board and, as applicable, the OCC (hereafter, referred to as "supervisors"). This sound practice is set forth in the agencies' advanced approaches risk-based capital rule.[3] This rule requires that a banking organization notify its primary federal regulator when it makes any significant change to its modeling assumptions or any change to an advanced system that would result in a material change in its RWA amount for an exposure type (for example, wholesale, retail, counterparty, securitization, equity, and operational risk).[4]

[1] This guidance uses the term "banking organization" to refer to any OCC-supervised institution subject to the advanced approaches risk-based capital rule set forth at 12 CFR 3, subpart E, and any Board-regulated institution that uses the advanced approaches risk-based capital rule set forth in 12 CFR 217, subpart E.

[2] In this guidance, the term "model" should be interpreted broadly and in the same manner as in SR 11-7, "Guidance on Model Risk Management," and OCC Bulletin 2011-12, "Supervisory Guidance on Model Risk Management."

[3] See 12 CFR 3.123(a) (OCC) and 12 CFR 217.123(a) (Board).

[4] When a counterparty credit risk model is used, the agencies' rule also requires a banking organization to notify its supervisors of any material changes in how the organization determines the stress period used to calculate internal estimates for "haircuts." Refer to 12 CFR 3.132(b)(2)(iii)(A)(5) (OCC) and 12 CFR 217.132 (b)(2)(iii)(A)(*5*) (Board). Additionally, the banking organization must obtain approval for a material change in the methodology or before ceasing to use the internal model methodology for a transaction type. Refer to 12 CFR 3.132(d)(1)(iv)) (OCC) and 12 CFR 217.132 (d)(1)(iv) (Board). Although this guidance does not specifically address the process for notification or approval under section 132 of the rule, the notifications to the supervisors generally should include the background documentation summarized in the next section of this guidance and be delivered with appropriate advance notice.

General Implementation Guidance

A banking organization is expected to provide its supervisors with reasonable advance notice of planned model changes that could have a material impact on its RWA. At a minimum, a banking organization should notify supervisors of planned model changes at least 30 days before the start date of the calendar quarter in which the changes are to become effective (for example, by June 1 for changes effective in the quarter beginning July 1). At the time of notification, the banking organization should provide supervisors with all relevant supporting information, including the information detailed in the next section of this guidance. Supervisors will review the supporting materials and will seek to provide preliminary feedback to the banking organization within 90 to 120 days. This preliminary supervisory feedback should not be interpreted as a final determination that the model changes comply with the qualification requirements or as limiting in any way the ability of supervisors to conduct future reviews of the changes. In some cases, such preliminary feedback may include a recommendation that the planned changes be deferred until an in-depth review can be carried out by supervisors.

To facilitate resource planning and timely feedback, banking organizations are encouraged to begin coordinating planned model changes with supervisors well in advance of the 30-day notice period discussed above. Working with resident examiner teams, banking organizations should avoid implementation schedules for which preliminary supervisory reviews would overlap with major supervisory activities, such as the annual Comprehensive Capital Analysis and Review. In addition, for each major exposure type, banking organizations should attempt to consolidate multiple model changes into a single annual model update.

Documentation to Support Change Notifications

Each banking organization is responsible for ensuring that any planned model changes are appropriate and meet supervisory expectations. Banking organizations, therefore, should implement and maintain strong change control processes to identify planned model changes and to ensure that related action plans incorporate appropriate justification, validation, quantification of RWA impacts, and internal reporting to senior management before implementation of the changes in production systems. Furthermore, the banking organization should have clear policies for determining when an individual model change or a group of model changes is deemed material. The metrics used for this purpose (both qualitative and quantitative) should be commensurate with the size, complexity, and riskiness of the banking organization’s underlying risk positions.

To support supervisory review of planned model changes, a banking organization should provide to its supervisors the following information:

1. A description of each model change and its rationale/justification.
2. Quantification of the potential impacts of the planned model changes (individually and cumulatively) on RWA by relevant exposure type and for the banking organization overall.

3. Relevant developmental documentation and validation and audit reports, including a cumulative history of how model changes in recent years have affected RWA for the relevant exposure type(s).

Additionally, banking organizations should maintain an ongoing inventory of historical and planned changes to systems used in quantifying RWA under the rule. The inventory should include appropriate supporting documentation on the type of change, rationale, developmental evidence and testing results, and cumulative RWA impact analysis over a multiyear horizon. This inventory and supporting documentation should be made available to supervisors on request.

This guidance applies to any model change that could have a material impact on the calculation of RWA for any exposure type. Examples of such model changes include

- changes in definitions of default or downturn periods underlying quantifications of probability of default (PD), loss given default (LGD), or exposure at default (EAD).
- changes in definitions of units of measure underlying operational risk models.
- changes in reference data or data filtering procedures used in modeling or risk parameter quantification.
- changes in risk rating or segmentation procedures.
- changes in statistical techniques or underlying modeling assumptions.