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Model Risk Management Guidance SR 26-2 in the Era of AI

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On April 17, 2026, the US federal banking agencies replaced most of their long-standing Supervisory Guidance on Model Risk Management (MRM), SR 11-7, with new interagency guidance.[1] The Federal Reserve issued it as SR 26-2,[2] the Office of the Comptroller of the Currency (OCC) as Bulletin 2026-13,[3] and the Federal Deposit Insurance Corporation (FDIC) as Financial Institution Letter FIL-15-2026.[4] The update also retired the 2021 interagency statement on Bank Secrecy Act/Anti-Money Laundering (BSA/AML) risk management[5] and the earlier credit-scoring guidance (OCC Bulletin 1997-24).[6] This change resets supervisory posture for the first time since 2011.

This CRA *Insight* explains the new guidance in addition to a planned interagency request for information on generative and agentic AI, and the increasingly divergent international approaches to model and AI risk governance. This piece also notes the tension between banks weighing where or how fast to deploy AI across business lines and internal functions, while searching for effective, credible risk-based approaches to model governance, validation, and testing.

A bank that builds a durable, materiality-based governance framework will be positioned to deploy AI faster and more confidently than peers that treat model risk primarily as a compliance exercise — an advantage

1 https://www.federalreserve.gov/supervisionreg/srletters/sr1107a1.pdf

2 https://www.federalreserve.gov/supervisionreg/srletters/SR2602.htm

3 https://www.occ.gov/news-issuances/bulletins/2026/bulletin-2026-13.html

4 https://www.fdic.gov/model-risk-management-revised-guidance.pdf

5 https://bsaaml.ffiec.gov/manual/BSAAMLRiskAssessment/01

6 https://www.occ.gov/static/rescinded-bulletins/bulletin-1997-24.pdf

that ultimately shows up in customer and financial outcomes. We recommend steps bankers should take now and outline the assistance we can offer.

Covering the new guidance end-to-end, we help banks build and enhance MRM frameworks and validation standards; design materiality-based model tiering with quantified exposure; develop practical testing for generative and agentic AI; conduct explainability and bias testing for AI and machine-learning models; and assist with vendor and third-party model oversight, from benchmarking to documentation review. The new guidance presents a significant shift in strategy.

For fifteen years, SR 11-7 has served as the operating manual for MRM across the banking industry. The new guidance, SR 26-2, maintains its requirements for sound development, documentation, effective validation, ongoing monitoring, governance, and oversight of third-party models. However, SR 11-7 offered a comprehensive, comparatively prescriptive framework, while SR 26-2 explicitly guides institutions to use risk-based and tailored approaches to MRM. The expectation becomes the implementation of practices commensurate with each organization's model risk profile, model materiality, and operating complexity.

Several structural changes stand out and are discussed in detail below:

- SR 26-2 expressly omits generative and agentic AI from its scope.
- SR 26-2 updates expectations for third-party and vendor models, raising the bar for understanding vendor conceptual soundness and documentation.

The reaction among model risk professionals has been mixed. Some expressed relief that the materiality language is more risk-tiered, but this was paired with genuine concern about the omission of any discussion of generative and agentic AI. Some have also expressed concerns about the rewritten vendor guidance for banks that lean heavily on third-party models. On balance, it appears many practitioners welcome the chance to concentrate their efforts on areas where their businesses actually rely on models for material decisions.

While the new guidance is expected to be most relevant to banks above $30 billion in assets, that threshold is not absolute. It may apply to smaller banks due to the prevalence and complexity of their models, or because they engage in activities outside traditional community banking. A bank with heavy vendor-model use in BSA/AML, deposit pricing, or credit decisioning could be in scope.

SR 26-2 expressly states that it does not set enforceable standards or prescriptive requirements. Supervisory actions may still result from violations of law, or from unsafe or unsound practices stemming from insufficient management of model risk.

Materiality becomes the organizing principle

The new guidance focuses on materiality. SR 26-2 frames model risk through inherent risk, exposure, purpose, and use. Notably, it treats exposure as something that can be measured quantitatively, for example through portfolio size. The practical message for executives is to require more disciplined risk-tiering and stronger evidence so that development, validation, monitoring, and reporting are proportionate to genuine business and regulatory impact.

The guidance gives management more discretion but expects that discretion to be defensible. A bank should be able to explain which quantitative approaches are models, which models are material, why controls are scaled up or down, and how governance ensures effective challenge and timely remediation for

higher-risk uses. Many banks believe they already know where to draw the materiality line, but the new expectation that institutions quantify exposure will, for many, require significant effort.

Implications for oversight include:

- Board and committee reporting should concentrate on models that materially affect financial, regulatory, strategic, and customer outcomes, while retaining visibility into aggregate model risk.
- Any accelerated deployment or partial pre-use validation should be infrequent, and it should be accompanied by documented limitations, temporary restrictions, enhanced monitoring, stakeholder notification, and a time-bound remediation plan.
- The model validation function should be judged by expertise, objectivity, stature, and the ability to force timely remediation.

SR 26-2 reframes audit's role as an evaluation of whether the model risk management program is rigorous and effective—not simply as performing validations. The practical effect is a move away from technical re-testing of models and toward governance-level oversight, focusing on whether:

- The MRM framework and policies are commensurate with the bank's risk profile;
- The model validation team has the expertise, independence, and organizational standing to challenge model owners and developers and force remediation; and
- Risk-tiering is proportionate to actual business impact, and whether the set policies are followed.

For audit teams, this means a larger focus on the quality and credibility of the bank's effective challenge process.

A narrower definition

SR 26-2 defines a "model" as a complex quantitative method, system, or approach that applies statistical, economic, or financial theories to process input data into quantitative estimates. It explicitly excludes simple arithmetic functions such as spreadsheet calculations, and deterministic, rule-based processes where no such theory underpins their design or use.

It may rule out frequently used heuristic machine-learning techniques such as k-means clustering for customer segmentation. Credit and market risk managers will still need to monitor the performance of out-of-scope tools carefully. A tool's exclusion from the formal model definition does not eliminate its risk.

A parallel narrowing appears in how risk itself is framed relative to SR 11-7, which described model risk as including financial loss, poor strategic decisions, and reputational damage. SR 26-2 frames it more simply as "adverse financial consequences." The narrower framing aligns with the materiality construct. However, fair lending and BSA/AML model failures often produce legal and regulatory consequences, which can lead to financial consequences. Recent enforcement actions in the banking sector offer reminders that reputational and operational fallout can be existential, particularly for smaller institutions. Thus, the need to weigh both financial and non-financial consequences in materiality assessments remains.

The third-party validation step up

SR 26-2 offers fewer prescriptive checkboxes but leaves responsibility for outcomes with the bank. For institutions that buy rather than build models, the vendor oversight requirements include, arguably, the most consequential part of the guidance. Banks must understand a vendor model's conceptual soundness,

design, development data, and performance, even when source code is proprietary. Banks must document any customizations.

That poses a high bar for community banks and credit unions with limited leverage over a major model provider. It is precisely this asymmetry that makes pooled industry approaches and shared validation standards attractive. Vendors may be expected to disclose their conceptual designs and provide regular performance and testing reports.

At the same time, MRM experts at larger banks should be able to triangulate potential approaches used by vendors and build and maintain quality benchmark models. This would ease validation of vendor models significantly.

The third-party vendor requirements offer a window of opportunity for FinTechs to offer more transparent approaches.

Delays in AI adoption

Banks have suggested several factors that are slowing AI adoption. These include data quality, talent acquisition, budget, vendor concentration, tooling, and regulatory uncertainty. For some banks, slower adoption results from taking a more measured search for cases where AI delivers genuine benefit. Constraints in development speed may simply reflect the institution's internal risk appetite and its Board's level of comfort, rather than any particular regulatory guidance. Financial institution Boards may desire independent evaluations of AI models before they approve the technology. Appropriately, they are exercising caution, which may slow adoption.

Risk and compliance officers must translate AI risks into the vocabulary of materiality, vendor risk, and operational risk that boards already understand. That translation is itself what SR 26-2 seems to envision when it calls model development "not purely a technical exercise," but work that draws on risk, compliance, IT, data engineering, legal, and audit together. Best practices in MRM can mitigate risk concerns and provide Board comfort.

The AI carve-out

As noted above, SR 26-2 excludes generative and agentic AI from scope, while confirming that traditional statistical models and non-generative, non-agentic AI remain covered. Generative systems produce novel content by learning patterns from training data. Agentic systems plan and execute multi-step actions with persistent context—and frequently embed traditional models inside them, blurring the practical boundary of the carve-out.

These technologies are novel enough that asserting "the same principles apply" would offer little practical help. Gathering evidence and explaining how the principles translate is the better path. The carve-out is not a free pass. An organization's risk management and governance practices should still guide the determination of appropriate controls, and banks are still expected to apply analogous governance even absent prescriptive direction.

The agencies have also indicated that the gap is temporary by design. They have announced a planned interagency request for information on model risk management generally, and on banks' use of AI—including generative and agentic AI—specifically.

While the generative and agentic AI carve-out is understandable, these areas also need guidance. Some of this expertise falls outside the traditional scope of MRM, which is why a shared banking-sector standard could address a gap faced by many institutions. Specific MRM for generative and agentic AI may help move these uses from concept to production.

Federal AI policy is developing on a parallel track. The June 2026 Executive Order focuses on classified benchmarking and voluntary pre-release federal access to frontier models, while avoiding mandatory licensing or preclearance.[7] Separately, the bipartisan Great American AI Act discussion draft would create a federal AI governance framework, including temporary preemption of state AI model-development laws and independent verification for large frontier developers.[8]

Global context

Large international banks face a regulatory landscape for models and AI that may be increasingly divergent, but it started from a common point—SR 11-7—which triggered similar guidance around the world. Its life-cycle architecture—identification and inventory, development, independent validation, monitoring, and governance—became the de facto template for model risk supervision. The UK's PRA Supervisory Statement SS1/23, effective May 2024, recast those ideas into five principles and elevated model risk to a discipline in its own right.[9] Canada's OSFI Guideline E-23 took a comparable life-cycle approach and went further on definition, treating essentially any algorithm that processes data into an output—black-box AI and machine learning included—as a model.[10] The Monetary Authority of Singapore has advanced AI-specific governance guidance built on inventories, materiality assessment, and fairness and explainability.[11]

The European Union is a partial exception, addressing model risk within its binding prudential framework. The Capital Requirements Directive treats model risk as a component of operational risk.[12] The European Central Bank's Guide to Internal Models, the closest functional equivalent to the US guidance, governs the internal models that banks use to calculate regulatory capital for credit, market, and counterparty credit risk, and includes a dedicated section on machine-learning techniques.[13] While the EU's expectations are scoped more narrowly to capital models, they carry the force of binding regulation rather than non-enforceable guidance.

SR 26-2 narrows the inventory of tools being identified as models and it is likely that the US will devise a separate standard for generative and agentic AI. The UK and Canada are folding AI and machine learning explicitly into their model-risk guidance. The EU regulates AI directly, separately from MRM. Under the EU AI Act, AI used to assess the creditworthiness of individuals and to price life and health insurance is classified as "high-risk," carrying obligations for risk management, data governance, technical

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7 https://www.whitehouse.gov/presidential-actions/2026/06/promoting-advanced-artificial-intelligence-innovation-and-security/

8 https://trahan.house.gov/uploadedfiles/the_great_american_ai_act_discussion_draft.pdf

9 https://www.bankofengland.co.uk/prudential-regulation/publication/2023/may/model-risk-management-principles-for-banks-ss

10 https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/guideline-e-23-model-risk-management-2027

11 https://www.mas.gov.sg/regulation/circulars/id18_24

12 https://www.eba.europa.eu/regulation-and-policy/single-rulebook/interactive-single-rulebook/11764

13 https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.supervisory_guide202507.en.pdf

documentation, human oversight, logging, and conformity assessments.[14] The Act also captures US banks that serve EU customers.

The workable approach is a single, materiality-tiered model and AI governance framework, mapped jurisdiction by jurisdiction, that treats the most demanding overlapping requirement—often the AI Act's documentation and human-oversight obligations, or the UK's and Canada's broader model definitions—as binding where activities coincide. A model inventory should be regime-agnostic—capturing each AI and model use, its purpose, and the populations it affects—so that a single underlying record can be mapped to whichever obligations apply.

A practical agenda

For risk and compliance leaders, the near-term agenda is concrete. Start with a holistic assessment of the entire model inventory. Establish a simple, defensible materiality tiering. Understand the increased requirements for vendor-model oversight. Choose a few genuinely useful but low-risk applications to prove MRM and governance before scaling. Update documentation of relevant policies and procedures.

Focus on business problems, and not only on solutions. Map which parts of a decision process a model could improve, which it could address only inefficiently, and which it cannot solve at all—then introduce AI where it genuinely earns its place. The work done now on inventory, materiality, and vendor oversight will carry forward even if the supervisory stance shifts again.

How we can help

We provide assistance to financial institutions with review of MRM documentation, model development, model validation and quantitative studies, and establish practical and effective model risk management approaches that will outlast changing regimes. We can help to:

- Enhance MRM frameworks and validation standards by providing a well-reasoned framework that doubles as a working guide and training tool for first- and second-line teams.
- Devise a model tiering approach centered on materiality, including exposure quantification, with a defensible classification that drives the depth of validation, monitoring, and reporting.
- Enhance risk management for generative and agentic AI with practical and effective testing approaches that inform businesses and risk managers.
- Provide explainability and bias testing for AI and machine learning approaches, which can be scaled to model materiality, from full validation reviews to light-touch screening.
- Assist with vendor and third-party model oversight by benchmarking models, assessing conceptual soundness, and reviewing and enhancing documentation.

[14] On May 7, 2026, the Council of the EU and the European Parliament reached a provisional political agreement (the "Digital Omnibus"). The agreement still requires formal adoption, expected before August 2026. Those high-risk obligations will apply from December 2, 2027. The use of AI to assess the creditworthiness of natural persons is an Annex III high-risk use. See https://artificialintelligenceact.eu/.

References

Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency. 2026. *Revised Guidance on Model Risk Management*. Federal Reserve SR 26-2, available at: **https://www.federalreserve.gov/supervisionreg/srletters/SR2602.htm**; OCC Bulletin 2026-13; FDIC FIL-15-2026.

Board of Governors of the Federal Reserve System and Office of the Comptroller of the Currency. 2011. *Supervisory Guidance on Model Risk Management*. Federal Reserve SR 11-7, available at: **https://www.federalreserve.gov/boarddocs/srletters/2011/sr1107.pdf**

Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency. 2021. *Interagency Statement on Model Risk Management for Bank Systems Supporting Bank Secrecy Act/Anti-Money Laundering Compliance*. Federal Reserve SR 21-8, available at: **https://www.federalreserve.gov/supervisionreg/srletters/SR2108.htm**; OCC Bulletin 2021-19; FDIC FIL-27-2021.

Office of the Comptroller of the Currency. 1997. *Credit Scoring Models: Examination Guidance*. OCC Bulletin 1997-24, available at: **https://www.occ.gov/news-issuances/bulletins/2026/bulletin-2026-13.html**. Rescinded by OCC Bulletin 2026-13.

The White House. 2026. *Promoting Advanced Artificial Intelligence Innovation and Security*. Executive Order 14409, available at: **https://www.whitehouse.gov/presidential-actions/2026/06/promoting-advanced-artificial-intelligence-innovation-and-security**.

Obernolte, Jay, and Lori Trahan. 2026. *Great American Artificial Intelligence Act*. Discussion draft, 119th Congress. Available at: **https://trahan.house.gov/uploadedfiles/the_great_american_ai_act_discussion_draft.pdf**.

International guidance

European Parliament and Council of the European Union. 2013. *Directive 2013/36/EU on Access to the Activity of Credit Institutions and the Prudential Supervision of Credit Institutions and Investment Firms* (Capital Requirements Directive), Article 85. Available at: **https://eur-lex.europa.eu/eli/dir/2013/36/oj/eng**.

Prudential Regulation Authority, Bank of England. 2023. *Model Risk Management Principles for Banks*. Supervisory Statement SS1/23. Available at: **https://www.bankofengland.co.uk/prudential-regulation/publication/2023/may/model-risk-management-principles-for-banks-ss**.

Office of the Superintendent of Financial Institutions Canada. 2025. *Guideline E-23: Model Risk Management* Available at: **https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/guideline-e-23-model-risk-management-2027**.

Monetary Authority of Singapore. 2024. *Artificial Intelligence Model Risk Management*. Information Paper. Available at: **https://www.mas.gov.sg/publications/monographs-or-information-paper/2024/artificial-intelligence-model-risk-management**

European Central Bank. 2025. *ECB Guide to Internal Models*. Available at: **https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.supervisory_guide202507.en.pdf**.

European Parliament and Council of the European Union. 2024. *Regulation (EU) 2024/1689 Laying Down Harmonised Rules on Artificial Intelligence* (Artificial Intelligence Act). Available at: **https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng**.

About the Financial Economics Practice at CRA

Our consultants provide economic and financial analyses and advice to financial institutions, financial regulators, and counsel representing financial institutions. Our experts are skilled in quantitative modeling and econometrics, particularly as applied to issues in risk management, credit risk, and compliance risk in consumer lending markets. Our team brings deep expertise aligned with supervisory expectations, spanning model development, independent validation, and governance. We provide:

- Quantitative risk management including asset and liability management, stress testing and loss forecasting, market risk, and liquidity and interest-rate risk modeling.
- Qualitative model risk management.
- Analysis and review of AI and machine-learning approaches through the evaluation of performance and robustness, assessment of explainability, and addressing of bias and compliance risk within a sound governance framework.
- Fair lending analyses of underwriting, pricing, redlining, and servicing practices for use in litigation and regulatory investigations.

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