May 25, 2023

MEMORANDUM TO: Board of Directors

FROM: Doreen R. Eberley
Director, Division of Risk Management Supervision

Mark Pearce
Director, Division of Depositor and Consumer Protection

SUBJECT: **Notice of Proposed Rulemaking: Quality Control Standards for Automated Valuation Models**

Recommendation

Staff recommends that the Federal Deposit Insurance Corporation (FDIC) Board of Directors (Board) adopt and authorize publication in the *Federal Register* the attached notice of proposed rulemaking (NPR or proposed rule) with a 60-day comment period. The NPR would implement quality control standards mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) for the use of automated valuation models (AVMs) by mortgage originators and secondary market issuers in determining the collateral worth of a mortgage secured by a consumer's principal dwelling.

Under the proposal, the FDIC and other agencies[1] (together, referred to as agencies) would require institutions that engage in certain credit decisions or securitization determinations to adopt policies, practices, procedures, and control systems to ensure that covered AVMs adhere to four specified quality control standards described in detail below. Moreover, pursuant to their statutory authority under the Dodd-Frank Act to account for any other such factor the agencies determine to be appropriate, the agencies are proposing a fifth factor to require institutions to adopt policies, practices, procedures, and control systems to ensure AVMs adhere to quality control standards designed to comply with applicable nondiscrimination laws. The NPR seeks comment on all aspects of the proposal, including the fifth factor.

CONCUR:

Harrel M. Pettway
General Counsel

[1] Office of the Comptroller of the Currency (OCC); Board of Governors of the Federal Reserve System (FRB); National Credit Union Administration (NCUA); Federal Housing Finance Agency (FHFA); and Bureau of Consumer Financial Protection (CFPB).

Background

Statutory Authority

Section 1473(q) of the Dodd-Frank Act amended title XI of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (title XI)[2] to add a new section 1125 relating to the use of AVMs in valuing real estate collateral securing mortgage loans (section 1125).[3] The term "automated valuation model," as used in section 1125, describes any computerized model used by mortgage originators and secondary market issuers to determine the collateral worth of a mortgage secured by a consumer's principal dwelling.[4]

Section 1125 directs the agencies to promulgate regulations to implement quality control standards regarding covered AVMs.[5] Section 1125 requires covered AVMs adhere to quality control standards designed to:

(1) ensure a high level of confidence in the estimates produced by AVMs;
(2) protect against the manipulation of data;
(3) seek to avoid conflicts of interest;
(4) require random sample testing and reviews; and
(5) account for any other such factor that the agencies determine to be appropriate.[6]

As required by section 1125, the agencies consulted with the staff of the Appraisal Subcommittee (ASC) and the Appraisal Standards Board of the Appraisal Foundation (ASB) as part of promulgating this regulation. No substantive changes were made to the proposed rulemaking following these consultations.

In addition, while Federal agencies must consider the impact that their proposed rules could have on small entities, the Regulatory Flexibility Act (RFA),[7] as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA)[8] and the Dodd-Frank Act, imposes on the CFPB additional requirements with respect to small entities. As required, the CFPB convened and chaired a Small Business Review Panel (Panel), and the feedback gathered from the Panel was considered in the drafting of the NPR.

Existing Guidance Relating to the Use of AVMs

Since 2010, the FDIC along with the OCC, FRB, and NCUA have provided supervisory guidance on the use of AVMs by their regulated institutions in Appendix B to the Interagency Appraisal and Evaluation Guidelines (Guidelines).[9] The Guidelines recognize that an institution

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[2] 12 U.S.C. 3331 *et seq.*
[3] Pub. L. 111-203, 124 Stat. 1376, 2198 (2010), codified at 12 U.S.C. 3354.
[4] 12 U.S.C. 3354(d).
[5] 12 U.S.C. 3354(a)-(b).
[6] 12 U.S.C. 3354(a).
[7] 5 U.S.C. 601 et seq.
[8] Pub. L. No. 104-121, 110 Stat. 864 (1996)
[9] *See Interagency Appraisal and Evaluation Guidelines,* 75 FR 77450, 77468 (Dec. 10, 2010). The Guidelines were adopted after notice and comment.

may use a variety of analytical methods and technological tools in developing real estate valuations, provided the institution can demonstrate that the valuation method is consistent with safe and sound banking practices. The Guidelines recommend that institutions establish policies, practices, and procedures governing the selection, use, and validation of AVMs, including steps to ensure the accuracy, reliability, and independence of an AVM.[10] In addition to Appendix B of the Guidelines, the FDIC along with the OCC and Board, has issued guidance on model risk management practices (Model Risk Guidance) that provides supervisory guidance on validation and testing of computer-based financial models.[11] The agencies have also provided guidance on managing the risk inherent in the use of third-party service providers, such as outside entities that provide AVMs and AVM services.[12]

<u>Discussion of the Proposed Rule</u>

The proposed rule would require mortgage originators and secondary market issuers to adopt policies, practices, procedures, and control systems to ensure that covered AVMs adhere to quality control standards designed to meet specific quality control factors. As more fully described below, covered AVMs are those that are used in connection with making certain credit decisions or securitization determinations regarding a mortgage. The proposed rule would not set specific requirements for how institutions are to structure these policies, practices, procedures, and control systems. This approach would provide institutions the flexibility to tailor their quality controls for covered AVMs as appropriate based on the size of their institution and the risk and complexity of transactions for which they will use covered AVMs and to adapt as modeling technology continues to evolve. The proposed rule for FDIC would be housed in a new Subpart C to Part 323 of the FDIC Rules and Regulations.

A. Definitions

The NPR would define several terms applicable to the rulemaking by their standard meaning, including “control systems,” “dwelling,” “mortgage,” “mortgage originator,” and “secondary market issuer.” Other terms would be defined specifically for this proposal. For example, the proposed rule’s definition of an AVM is substantively identical to the definition in section 1125,[13] but reflects common terminology and clarifies that the determination of value relates to the dwelling; the definition is any computerized model used by mortgage originators and secondary market issuers to determine the value of a consumer’s principle dwelling collateralizing a mortgage.

The proposed rule would apply to AVMs used in connection with making credit decisions or covered securitization determinations because the collateral worth of a mortgage is generally determined, as opposed to monitored or verified, in connection with the types of decisions

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[10] *Id.*
[11] *See Supervisory Guidance on Model Risk Management*, *Guidance on Model Risk Management*, FDIC FIL-22-2017 (June 7, 2017).
[12] *See Third-Party Relationships: Risk Management Guidance*, *Third-Party Risk Guidance for Managing Third-Party Risk*, FDIC FIL-44-2008 (June 6, 2008) for applicable guidance issued by FDIC.
[13] The Dodd-Frank Act defines an AVM, as “any computerized model used by mortgage originators and secondary market issuers to determine the collateral worth of a mortgage secured by a consumer’s principal dwelling.” 12 U.S.C. 3354(d).

covered in these proposed definitions. The proposal would define specifically for this rule "credit decision" to mean a decision regarding whether and under what terms to originate, modify, terminate, or make other changes to a mortgage and would include a decision whether to extend new or additional credit or change the credit limit on a line of credit. The use of AVMs by mortgage originators to monitor the value of the underlying real estate collateral in their loan portfolios would not be a credit decision for the purposes of this proposed rule.

The proposed rule would also define "covered securitization determination" to mean a determination regarding (1) whether to waive an appraisal requirement for a mortgage origination in connection with the potential sale or transfer to a secondary market issuer (appraisal waiver decisions), or (2) structuring, preparing disclosures for, or marketing initial offerings of mortgage-backed securitizations. AVMs used to monitor collateral value in mortgage-backed securitizations after they have already been issued would not be covered securitization determinations.

B. Scope of the Proposed Rule

The quality control standards in section 1125 of title XI apply to AVMs used by mortgage originators and secondary market issuers to determine the collateral worth of a mortgage secured by a consumer's principal dwelling.[14] For the purposes of this rule, principal dwelling is defined as a residential structure that contains one to four units, whether or not that structure is attached to real property. The term includes an individual condominium unit, cooperative unit, factory-built housing, or manufactured home, if it is used as a residence. A consumer can have only one principal dwelling at a time. Thus, a vacation or other second home would not be a principal dwelling. However, if a consumer buys or builds a new dwelling that will become the consumer's principal dwelling within a year or upon completion of construction, the new dwelling is considered the principal dwelling.

The proposed rule would implement this statutory scope provision by applying the standards when an AVM is used to make a determination of collateral value, as opposed to other uses such as monitoring value over time or validating an already completed valuation. Such determinations of collateral value are generally made in connection with credit decisions or covered securitization determinations, for example, when using an AVM to determine a new value before originating a purchase-money mortgage or placing a loan in a securitization. Other uses of AVMs, such as for portfolio monitoring, do not involve making a determination of collateral value, and thus would not be within the scope of the proposed rule.

Additionally, the proposed rule would not cover use of an AVM by a certified or licensed appraiser in developing an appraisal. While appraisers may use AVMs in preparing appraisals, they must achieve credible results in preparing an appraisal under the Uniform Standards of Professional Appraisal Practice (USPAP) and its interpreting opinions. As such, an appraiser

[14] 12 U.S.C. 3354(d).

must make a valuation conclusion that is supportable independently and does not rely on an AVM to determine the value of the underlying collateral.

However, the proposed rule would cover AVMs used in the process of preparing evaluations.[15] This distinction between appraisals and evaluations reflects that USPAP standards and appraiser credentialing are not required for individuals who prepare evaluations. The proposed rule's coverage of AVMs used in the process of preparing evaluations also reflects the more extensive use of, and reliance on, AVMs within the evaluation function.

AVMs used in reviews of completed determinations (*e.g.*, appraisals and evaluations) also would not be covered by the proposed rule, given that the underlying appraisal or evaluation determines the value of the collateral, rather than the appraisal or evaluation review. The appraisal review serves as a separate and independent quality control function.[16] In the proposed rule, the agencies do not make distinctions based on the amount of time between the completed determination and the subsequent review; if an AVM is solely being used to review the completed determination, such AVM use would not be covered by the proposed rule regardless of how soon the AVM is used after that determination.

Section 1125(c)(1) provides that compliance with regulations issued under this subsection shall be enforced by—with respect to a financial institution, *or subsidiary owned and controlled by a financial institution and regulated by a Federal financial institution regulatory agency*— the Federal financial institution regulatory agency that acts as the primary Federal supervisor of such financial institution or subsidiary.[17]

C. AVMs Used In Connection With Making Credit Decisions

The proposed rule would apply to AVMs used in connection with making a "credit decision," which refers to a decision regarding whether and under what terms to originate, modify, terminate, or make other changes to a mortgage.

The proposal to limit the scope of the rule to credit decisions and covered securitization determinations reflects the statutory definition of AVM, which focuses on the use of an AVM by

[15] Under the appraisal regulations issued by the OCC, FRB, and FDIC, lenders regulated by those agencies are required to obtain "evaluations" for certain transactions that fall within exceptions in the appraisal regulations. *See* 12 CFR 34.43(b) (OCC); 12 CFR 225.62(c) (Board); and 12 CFR 323.3(b) (FDIC); *see also Interagency Appraisal and Evaluation Guidelines*, 75 FR at 77460 (discussing transactions that require evaluations under the appraisal rules and providing recommendations for evaluation development). Evaluations must be consistent with safe and sound banking practices.
[16] Appraisals are subject to appropriate review under the appraisal regulations. *See* 12 CFR 34.44(c); (OCC); 12 CFR 225.64(c) (FRB); 12 CFR 323.4(c) (FDIC); 12 CFR 722.4(c) (NCUA). While these reviews are independent of, and subsequent to, the underlying appraisals and evaluations, the reviews generally take place before the final approval of a mortgage loan.
[17] *See* 12 U.S.C. 3354(c)(1) (emphasis added). The term "Federal financial institutions regulatory agencies" means the FRB, the FDIC, the OCC, the former OTS, and the NCUA. 12 U.S.C. 3350(6). Title III of the Dodd-Frank Act provides that the OCC is now the Federal financial institutions regulatory agency for Federal savings associations. Title III of the Dodd-Frank Act also provides that the FDIC is the federal financial institutions regulatory agency for State savings associations. Finally, the Dodd-Frank Act provides that the FRB is responsible for regulation of

mortgage originators and secondary market issuers to *determine* the collateral worth of a mortgage secured by a consumer's principal dwelling.[18] The proposed rule would distinguish between using AVMs to determine the value of collateral securing a mortgage versus using AVMs to monitor, verify, or validate a previous determination of value (*e.g.*, the proposed rule would not cover a computerized tax assessment used to verify the valuation made during the origination process).[19] The proposed rule focuses on those aspects of mortgage and securitization transactions where the value of collateral is typically determined.

In addition, the proposed rule would cover the use of AVMs in deciding whether to change the terms of an existing mortgage even if the change does not result in a new mortgage origination, as long as a "mortgage originator" or "secondary market issuer," or servicers that work on their behalf, uses an AVM to determine the value of a mortgage secured by a consumer's principal dwelling. The proposed rule also would cover AVMs used to decide whether or to what extent to reduce or suspend a home equity line of credit.

D. AVMs Used by Secondary Market Issuers

Since secondary market issuers are referred to in the statute, and the primary business of secondary market issuers is to securitize mortgage loans and to sell those mortgage-backed securities to investors, the proposed rule would cover AVMs used in securitization determinations. As mentioned above, the proposed rule would define "covered securitization determination" to include determinations regarding, among other things, appraisal waiver decisions. Under the proposal, a secondary market issuer that uses AVMs in connection with making appraisal waiver decisions would be required to have policies, practices, procedures and control systems in place to ensure that the AVM supporting those appraisal waiver decisions adheres to the rule's quality control standards. In contrast, a mortgage originator that requests an appraisal waiver decision from a secondary market issuer would not need to ensure that the AVM used to support the waiver meets the proposed rule's quality control standards because the secondary market issuer would be using the AVM to support the appraisal waiver decision in this context, not the mortgage originator.

For example, because the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) (collectively, the GSEs) use their AVMs to determine whether the mortgage originator's estimated collateral value or the contract price meets acceptable thresholds for purposes of obtaining a waiver for a GSE required appraisal, the proposed rule would require the GSEs, as secondary marker issuers, to maintain policies, practices, procedures, and control systems designed to ensure GSEs' use of such AVMs adheres to the proposed quality control standards. On the other hand, when a mortgage originator submits a loan to determine whether a GSE will offer an appraisal waiver, the mortgage originator would not be making a "covered securitization determination" under the proposed rule because the GSE would be using its AVM to make the appraisal waiver decision in this context.

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savings and loan holding companies. The term "financial institution" means an insured depository institution as defined in [12 U.S.C. 1813] or an insured credit union as defined in [12 U.S.C. 1752]. *See* 12 U.S.C. 3350(7).

[18] 12 U.S.C. 3354(d) (emphasis added).

[19] Many secondary market transactions by regulated entities require an appraisal unless an appraisal consistent with regulatory standards was obtained at the time of origination. *See* 12 CFR 323.3(a)(8).

As a result, the mortgage originator would not be responsible for ensuring that the GSE's AVMs comply with the proposed rule's quality control standards.

The proposed rule would also define "covered securitization determination" to include determinations regarding, among other things, structuring, preparing disclosures for, or marketing initial offerings of mortgage-backed securitizations.[20] However, AVMs used to monitor collateral value in mortgage-backed securitizations after they have already been issued would not be covered. The proposed rule would also cover AVM usage if and when a secondary market issuer uses an AVM as part of a new or revised value determination in connection with covered securitization determinations.

E. Statutory Quality Control Standards

The proposed rule would require mortgage originators and secondary market issuers that engage in credit decisions or covered securitization determinations themselves, or through or in cooperation with a third-party or affiliate, to adopt policies, practices, procedures, and control systems to ensure that AVMs used in these transactions adhere to quality control standards designed to (1) ensure a high level of confidence in the estimates produced; (2) protect against the manipulation of data; (3) seek to avoid conflicts of interest; and (4) require random sample testing and reviews. This approach would allow mortgage originators and secondary market issuers the flexibility to tailor their quality control standards for covered AVMs as appropriate based on the size of their institution and the risk and complexity of transactions for which they will use covered AVMs. Further, the four specified statutory quality control factors are consistent with practices that many participants in the mortgage lending market already follow.

These quality control factors are also consistent with the guidance documents described in the background section above that apply to many regulated institutions that would be subject to this rule, and it is anticipated that the guidance documents will remain outstanding and available for reference. The agencies decided against proposing a more prescriptive rule as different policies, practices, procedures, and control systems may be appropriate for institutions with different business models and risk profiles, and a more prescriptive rule could unduly restrict institutions' efforts to tailor their risk management practices accordingly.

F. Proposed Fifth Nondiscrimination Quality Control Factor

Section 1125 provides the agencies with the authority to account for any other such factor they determine to be appropriate.[21] Based on this authority, the agencies propose to include a fifth factor that would require mortgage originators and secondary market issuers to adopt policies, practices, procedures, and control systems to ensure that AVMs used in connection with making

[20] *See*, *e.g.*, *Asset Backed Securities*, 70 FR 1505, 1544 (Jan. 7, 2005) (examples of asset characteristics that are "material" include LTV ratios); *Appraisals for Higher-Priced Mortgage Loans*, 78 FR 78519, 78533 (Dec. 26, 2013) ("The credit risk holder of the existing obligation might obtain a valuation . . . to estimate LTV for determining the appropriate securitization pool for the loan.").
[21] 12 U.S.C. 3354(b).

credit decisions or covered securitization determinations adhere to quality control standards designed to comply with applicable nondiscrimination laws.

Institutions have a preexisting obligation to comply with Federal nondiscrimination laws,[22] and compliance with applicable nondiscrimination laws with respect to AVMs may be indirectly reflected within three of the first four statutory quality control factors. For example, ensuring a high level of confidence in the estimates produced includes ensuring they are not the result of unlawful discrimination. While existing nondiscrimination law applies to AVMs, the agencies propose to include a fifth quality control factor relating to nondiscrimination to heighten awareness among lenders of the applicability of nondiscrimination laws to AVMs. In this vein, specifying a fifth factor on nondiscrimination would create an independent requirement for institutions to establish policies, practices, procedures, and control systems to address nondiscrimination specifically, thereby further mitigating discrimination risk in their use of AVMs. The agencies' view is that specifying a nondiscrimination factor would increase confidence in AVM estimates and support well-functioning AVMs.

As with models more generally, there are concerns about the potential for AVMs to discriminate, such as by replicating historical patterns of discrimination. Models may discriminate because of the data used or other aspects of a model's development, design, implementation, or use.[23] Attention to data is particularly important to ensure that AVMs do not rely on data that may create discrimination risks. Because AVMs typically involve less human discretion than appraisals, AVMs have the potential to reduce human bias. Yet without adequate attention to ensuring compliance with Federal nondiscrimination laws, AVMs also have the potential to introduce associated discrimination risks. Moreover, if models such as AVMs discriminate, the resulting harm could be widespread because of the high volume of valuations that even a single AVM can process.

Requiring institutions using covered AVMs to adopt fair lending compliance policies and practices would be consistent not only with current law but also with well-established fair lending guidance. The OCC, FRB, FDIC, NCUA, FHFA, and CFPB have issued statements and other materials setting forth principles the agencies will consider to identify discrimination.[24]

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[22] *See e.g.*, Equal Credit Opportunity Act (15 U.S.C. 1691(a)) and Fair Housing Act (42 U.S.C. 3605).

[23] In other contexts, models and data have the potential to be a source of bias and may cause consumer harm if not designed, implemented, and used properly. *See generally,* Federal Trade Commission, *Big Data: A Tool for Inclusion or Exclusion? Understanding the Issues* (Jan. 2016), *available at* *https://www.ftc.gov/system/files/documents/reports/big-data-tool-inclusion-or-exclusion-understanding-issues/160106big-data-rpt.pdf*; Reva Schwartz et al., *A Proposal for Identifying and Managing Bias in Artificial Intelligence,* Nat'l Inst. of Standards & Tech., U.S. Department of Commerce (June 2021), *available at* *https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1270-draft.pdf*. *See also* Andreas Fuster et al., *Predictably Unequal? The Effects of Machine Learning on Credit Markets*, 77 J. of Fin. 5 (Feb. 2022), *available at https://doi.org/10.1111/jofi.13090*; Emily Bembeneck, et al., *To Stop Algorithmic Bias, We First Have to Define It,* Brookings Inst. (Oct. 21, 2021), *available at* *http://brookings.edu/research/to-stop-algorithmic-bias-wefirst-have-to-define-it/*.

[24] *See, e.g.*, Interagency Task Force on Fair Lending, *Policy Statement on Discrimination in Lending*, 59 FR 18266 (Apr. 15, 1994), *available at* *https://www.govinfo.gov/content/pkg/FR-1994-04-15/html/94-9214.htm;* Interagency Fair Lending Examination Procedures (Aug. 2009), *available at* *https://www.ffiec.gov/PDF/fairlend.pdf;* Bureau of Consumer Financial Protection, *Examination Procedures - ECOA* (Oct. 2015), *available at* *https://files.consumerfinance.gov/f/documents/201510_cfpb_ecoa-narrative-and-procedures.pdf;* Federal Housing

The OCC, FRB, FDIC, NCUA, and CFPB have further underscored the importance of robust consumer compliance management to prevent consumer harm in the Interagency Policy Statement on the Use of Alternative Data in Credit Underwriting (Alternative Data Policy Statement).[25]

The agencies seek comment on the proposal to specify a nondiscrimination quality control factor, including ways they could facilitate compliance for smaller financial institutions and whether additional clarity should be provided to assist institutions in complying with the proposed fifth factor.

Comment Period and Effective Date

Staff recommends issuing this proposal with a 60-day comment period and seeks comment on all aspects of the proposal. The agencies propose an effective date of the first day of a calendar quarter following the 12 months after publication in the *Federal Register* of any final rule based on this proposal to give regulated institutions time to come into compliance with the rule. The agencies also are seeking comment on this extended implementation period.

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Fin. Agency, *Policy Statement on Fair Lending*, 86 FR 36199 (July 9, 2021), *available at* https://www.govinfo.gov/content/pkg/FR-2021-07-09/pdf/2021-14438.pdf.

[25] In the Alternative Data Policy Statement, the agencies emphasized that "[r]obust compliance management includes appropriate testing, monitoring and controls to ensure consumer protection risks are understood and addressed." *Id. Interagency Statement on the Use of Alternative Data in Credit Underwriting* (Dec. 2019), *available at* https://files.consumerfinance.gov/f/documents/cfpb_interagency-statement_alternative-data.pdf; Consumer Fin. Prot. Bureau, *Supervisory Highlights: Summer 2013*, 5-11 (Aug. 2013), *available at* https://files.consumerfinance.gov/f/201308_cfpb_supervisory-highlights_august.pdf (discussing the pillars of a well-functioning CMS). *See also* Federal Financial Institutions Examination Council (FFIEC), *Notice and Final Guidance, Uniform Interagency Consumer Compliance Rating System*, 81 FR 79473 (Nov. 14, 2016), *available at* https://www.ffiec.gov/press/PDF/FFIEC_CCR_SystemFR_Notice.pdf ("in developing the revised CC Rating System, the Agencies believed it was also important for the new rating system to establish incentives for institutions to promote consumer protection by preventing, self-identifying, and addressing compliance issues in a proactive manner. Therefore, the revised rating system recognizes institutions that consistently adopt these compliance strategies.").