

Quality Control Standards for Automated Valuation Models

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Title: Quality Control Standards for Automated Valuation Models

On behalf of the Collateral Risk Network (CRN) membership, we appreciate the opportunity to provide feedback to the questions presented in the Interagency Guidance for Automated Valuation Model Quality Standards.

For any housing transactions, CRN recognizes and insists that all valuation models are to be free from bias, including bias based on racial or other characteristics identified of protected classes by the Fair Housing Act of 1968. Additionally, regardless of model or product type, Quality Control Standards are necessary to ensure safety and soundness of the housing finance system while ensuring protection of the consumer's right to a fair valuation. In the current state, automated valuation systems rely on the process of compiling non-standardized real estate and the development of algorithms to produce value estimates. Often, factors that address real estate pricing, such as sales concessions, buyer and seller motivation and other important influences are absent in the production of expected prices and values by automated models. This is a significant risk factor that exposes the process to manipulation, abuse and heightened risk of error.

The regulatory approach for real estate appraisals and evaluations since the adoption of Title XI: FIRREA, has been prescriptive in nature to ensure focus on safety and soundness. The Uniform Standards of Professional Appraisal Practice require that development and reporting of real estate appraisals adhere to the uniform standard for all federally related transactions. The Interagency Real Estate Appraisal and Evaluation Guidelines are prescriptive on the content that is required for both real estate appraisals and real estate evaluations.

The use of Automated Valuation Models (AVM's) is addressed in Appendix B of the Interagency Real Estate Appraisal and Evaluation Guidelines, which requires that institutions have policies and procedures in place for the use of AVM's in a safe and sound manner. Unfortunately, regulatory guidance lacks in providing basic minimum criteria on how quality is to be measured when the institution chooses to utilize an AVM.

The proposal cites a quality standard approach that is not prescriptive but principle-based. While there is some merit to allowing institutions to maintain flexibility when developing control standards, CRN is suggesting minimum criteria be established to ensure that both consumers and the public trust are protected in the use of AVM's.

CRN recommends that as a minimum requirement of any regulated institution that relies on an AVM to provide information to consumers regarding their use of an AVM for a credit decision through documented disclosure of such use. The disclosure should include:

• Identification of the AVM product options available to the institution associated with a mortgage loan product application



- Definitions of AVM products and disclosure to the consumer the difference between an AVM and other valuation products (i.e. real estate appraisal and a real estate valuations) Identification of the purpose, intended use and intended user of the AVM product
- Limitations on the use of the AVM product
- Processes available for the consumer for any actions to be taken in the event the valuation is found to be inaccurate or erroneous or inconsistent with the consumers expectation of result

We would like to highlight the tenets upon which our responses to the questions put forth in the notice are based:

1. Any proposed quality control standard should promote credibility and integrity.

2. Model providers should be required to provide a level of transparency on the model development and the application of algorithms to provide the institution or secondary market issuer with a basic level of understanding of how the model derives conclusions so the institution may implement effective quality control standards.

3. There is a need for standardization of testing and the reporting of AVM results to facilitate the implementation of consistent and effective AVM quality control and usage standards across loan originators and secondary market issuers. Measurements should include performance and risk mitigation thresholds to provide transparent compliance steps for the AVM provider, Lender/User and Agency or Regulator.

4. While a principles-based option may mitigate compliance costs and foster innovation in the AVM space, there is a need to attain uniformity and consistency when determinations of relevancy and confidence levels are required. The Rule should specifically cite those determinations of relevance and confidence levels, solely made by the AVM provider-or any related parties should not be relied upon as a standard of quality.

5. It should be explicitly stated in the Rule that AVM's must not directly violate or contribute to a violation of the Fair Housing Act of 1968.

6. A recognition in the guidance that AVM's are highly dependent on the availability of quality property-related data. Often no single AVM solution can manage the requirement to maintain a high confidence level in all locations to meet safety and soundness standards.

7. A requirement that the government sponsored enterprises be transparent with secondary market participants of their use of AVM and the quality standards they are subject to.

Please find below responses on behalf of the CRN membership.

Question 1 Response:

Strike the phrase "Other changes" from the text to make the rule clear. A loan modification specifically is a change in the terms of the loan which necessitates a re-adjudication. At the time of modification, the collateral value is re-assessed to ensure it is still sufficient to cover the lien in the advent of a foreclosure after the loan



modification (including home equity line of credit reductions or suspension) is finalized and accepted. When an AVM is used for this purpose, it requires the same treatment as when used in an initial credit decision.

Question 3 Response:

While there may be limited competition for origination products and secondary market issuers who may not be held to the standard, safety and soundness concerns and consumer protections should be the driving factors for the Rule. Any MBS offering should follow the same rules with regard to the use of AVMs as outlined in the proposed Rule. This change would resolve an unfair advantage that exists currently, with reliance by secondary market issuers on proprietary, non-transparent and unregulated AVMs powered by data unavailable to the marketplace.

Question 5 Response:

The CRN understanding is that the AVM is not the primary source of value indication for a consumer's dwelling but is used to measure the risk of the estimate provided with a loan application. That is, the AVM is used to test the reasonableness of the applicant's provided value estimate. When loan product and credit criteria are met, the waiver is granted when the stated value on the application falls within a prescribed criteria established by the secondary market issuer. The secondary market issuer is carrying the risk of the use of the AVM, not the originating lender. Requiring mortgage originators to perform quality control reviews on secondary market AVM's would present increased risk by creating broader confusion among participants and consumers, create process delays, and will increase the cost burden of obtaining qualified staff or third parties to administer to any program adding a cost that will be passed on to consumers.

Question 6 Response:

It is our understanding that some loans in MBS pools may have been originated when an AVM was used as the basis for establishing a measurement of collateral value. For any loans utilizing an AVM, CRN promotes consistent quality control standard requirements, to ensure public trust, safety and soundness and consumer protections.

Question 7 Response:

CRN promotes and supports consistent requirements across all activities by institutions and secondary market issuers.

Question 8 Response:

CRN does not support exempting federally backed securitizations from the AVM quality control standards. An inconsistent approach to the development of quality standards will not ensure public trust or promote a consistent level of safety and soundness across stakeholders nor provide consistent consumer protection. Exemptions will only create confusion and have the potential to increase the risk of unfair treatment of consumers.



Question 9 Response:

There is need for guidance on what practices are, and more importantly, what practices are not, expected when attempting to:

- A. Ensure a high level of confidence in the estimates produced without reliance on model-provided confidence measurements;
- B. Protection against the manipulation of data;
- C. Avoidance of conflicts of interest;
- D. Requirements for random sample testing and reviews; and
- E. Requirements to comply with applicable nondiscrimination laws.

Question 10 Response:

Appraisers are effectively precluded from obtaining an AVM result and presenting it as an opinion of Market Value. The appraiser is subject to all the integrity rules (ethics, competency, scope of work and recordkeeping), as well as Standards 1 and 2 of USPAP. The appraisal standard requires transparency. AVM products are built on proprietary processes. For an appraiser to utilize an AVM in the development of an appraisal "An appraiser must have a basic understanding of how the AVM works." (see USPAP Advisory Opinion 18). The appraiser is only permitted to use facts, algorithms, and visuals to show analysis and support conclusions. As AVM's are sale price models, and not held to a standard of development of an opinion of value, they have limited application in the appraisal process and under USPAP. Individual appraisers cannot certify that an AVM result is credible, without gaining a full understanding of the development of the AVM.

Question 11 Response:

Advantages: None.

Disadvantages: Allowing appraisers to utilize AVM's that are not subject to Quality Standards will create the opportunity for institutional and consumer confusion and heightened risk of misapplication of AVM results.

Question 12 Response:

Currently appraisals and evaluations are required to be reviewed to ensure the appraisal or evaluation contain "..sufficient information and analysis to support an institution's decision to engage in the credit transaction.." and "Through the review process, the institution should be able to assess the reasonableness of the appraisal or evaluation, including whether the valuation methods, assumptions, and data sources are appropriate and well-supported." (Interagency Real Estate Appraisal and Evaluation Guidelines Page 15). There is no requirement that an AVM be utilized in the review process. If a lender chooses to utilize an AVM to test the reasonableness of the appraisal or real estate evaluation CRN recommends the AVM's utilized to test the reasonableness of an appraisal or evaluation be subject to AVM Quality Control Standards. Guidance to institutions is recommended when establishing determinations of materiality when variations exist between real estate appraisal or evaluation conclusions and AVM's.



Question 13 Response:

CRN promotes consistent requirements across all activities by institutions and secondary market issuers to ensure public trust, safety and soundness and consumer protections.

Question 19 Response:

As currently stands, the Rule does not require AVM's to be held to a quality standard for non-owner-occupied properties (i.e. investment properties, second-homes). Not requiring a quality control standard for dwellings that are not defined as primary is inconsistent with safe and sound risk management practices.

Question 30 Response:

CRN believes that additional guidance is necessary to implement quality control standards that protect the safety and soundness of financial institutions while ensuring consumer protection.

The lack of transparency of algorithmic processes for AVM's products is extremely problematic. Approaches to testing for confidence, manipulation of data, conflicts of interest lack uniformity by the providers and users of AVM products.

The Collateral Risk Network (CRN) recognizes that there is no industry standard for confidence level measurement and CRN contends that AVM providers can furnish basic algorithmic inputs and logic while maintaining the confidentiality of their proprietary algorithms, thereby granting financial institutions the requisite transparency to formulate effective policies and practices to be incorporated into their control systems. This approach will ensure that AVMs used in covered transactions comply with quality control norms intended to address the concerns noted earlier.

CRN is a strong advocate for the development of open real property data standards that will strengthen the entire valuation modeling process (AVM, appraisals and evaluations).

CRN recommends the following factors to be utilized within this Risk Based Framework when considering an AVM:

1) Standardization of Confidence Score measurements provided by AVM modelers.

2) Use of Model Preference Tables that take into consideration data integrity elements including, but not limited to, similarity, temporality and proximity characteristics of the data.

3) Model Waterfalls/Cascades aligned with the presentation of transaction risk

4) Hit Rates may only be used as a factor to determine measurement for model coverage and not a measurement of model accuracy.



5) AVM Reports need consistent reporting elements that clearly and transparently disclose the key metrics and data driving the models.

Just as appraisals and evaluations require reporting standards, AVMs need reporting standards.

Question 31 Response:

A prescriptive approach will create uniformity in the use of AVM's in the marketplace, providing broader consumer protections and creating a level of consistent safety and soundness when institutions rely on AVM conclusions.

Prescription requiring a uniform standard will create a framework in the marketplace for:

1. Confidence level measurement - a uniform confidence measurement needs to be adopted.

2. Documentation and disclosure of data source(s), the date the data was obtained, the usage of proxy data and certification that data has not been manipulated.

3. Establishing the requirements that no conflicts of interest are present in model development, model preference table development and any resultant process (i.e. model cascades or waterfalls).

4. Designation of minimum criteria for random testing and citing the minimum requirements of testing for:

- a. Data integrity reviews
- b. Algorithm effectiveness
- c. Process reviews
- d. Quality Assurance Testing (MSE or other appropriate measurements)

5. The development of a testing standard and model procedures to test for adherence to non-discrimination laws including allowing the use of an independent third party to provide certification of proper controls.

Question 32 Response:

Advantage: The requirement is explicit and clear to all stakeholders of what is required.

Disadvantages: None



Question 33 Response:

While non-discrimination could be implied in the first factor (high level of confidence in the estimates) it is important that nondiscrimination be specifically addressed as a fifth factor as it requires a defined structure to build and maintain controls, leaving less to interpretation.

Question 34 Response:

Advantages: A flexible approach allows for adaptation of testing as the market adjusts to heightened requirements.

Disadvantages: There may be inconsistent practices amongst institutions when developing testing processes and procedures

Question 35 Response:

Without uniform testing standards and procedures, we do not believe existing compliance management systems and fair lending monitoring programs are able to assess whether a covered AVM, including the AVM's underlying artificial intelligence or machine learning, applies different standards or produces disparate valuations.

CRN recommends that the agencies issue guidance for the development of uniform testing standards and procedures, including the introduction of other standardized real property data (i.e. cost and income) to assist with the identification of potential risk.

Question 36 Response:

Prescriptive guidance on the use and application of appropriate concepts and testing standards currently used to measure fair housing compliance across other aspects of the lending decision process, as it applies to valuations.

Thank you for the opportunity to contribute to this important regulatory process.

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