



August 21, 2023

Department of the Treasury
Office of the Comptroller of
the Currency
400 7th Street, SW
Washington, DC 20219
Docket ID OCC-2023-0002

Board of Governors of the
Federal Reserve System
20th Street and Constitution
Avenue, NW
Washington, DC 20551
Docket No. R-1807

Federal Deposit Insurance
Corporation
550 17th Street, NW
Washington, DC 20429
RIN 3064-AE68

National Credit Union
Administration
1775 Duke Street
Alexandria, VA 22314
RIN 3313-AE23

Consumer Financial
Protection Bureau
1700 G Street, NW
Washington, DC 20552
Docket No. CFPB-2023-0025

Federal Housing Finance
Agency
400 7th Street, SW
Washington, DC 20219
RIN 2590-AA62

Re: Quality Control Standards for Automated Valuation Models

Zillow appreciates the opportunity to provide comments to the Office of the Comptroller of the Currency (OCC), Board of Governors of the Federal Reserve System (Board), Federal Deposit Insurance Corporation (FDIC), National Credit Union Administration (NCUA), Consumer Financial Protection Bureau (CFPB), and Federal Housing Finance Agency (FHFA) on the proposed Quality Control Standards for Automated Valuation Models rule. We commend the “Agencies” for taking this step to advance the usefulness and reliability of automated valuation models (AVMs) and hope that this rule will lead to broader confidence in and adoption of AVMs across the mortgage industry.

Zillow was founded to empower consumers with the knowledge and information they need to rent, buy, sell, and finance by bringing transparency to a traditionally opaque real estate market. In fact, with the Zestimate, we were the first to offer free automated home valuation estimates to consumers.¹ Our tools have helped consumers better understand the homebuying process, including important elements like appraisals and their impact on consumers’ ability to buy, sell, or finance a home. Bias in appraisals has been well documented², and we believe, based on our

¹ It’s important to note that the Zestimate value is not an appraisal and is not authorized for use as an Automated Valuation Model for credit decisions (AVM) as defined under the Dodd-Frank Act.

² <https://www.npr.org/2021/09/23/1039771981/black-latino-homeownership-real-estate-wealth-disparities-appraisals-undervalue>

years of experience in developing and continually refining the Zestimate, that broader adoption of automated valuation models with appropriate quality control measures could help mitigate elements of human bias while also increasing transparency, improving efficiency, and expanding equity for all consumers in real estate transactions. At the same time, we encourage the Agencies to consider how best to balance encouraging innovation and technological advancement while establishing appropriate quality control standards as the rulemaking process moves forward.

Zillow believes that uniform AVM standards are an important step toward increasing consumer and market confidence in the accuracy and fairness of automated valuations. More specifically, we believe that principles-based quality control standards in the regulation of AVM models will help foster innovation that will ultimately benefit consumers and the housing market. As AVM technology continues to develop, a prescriptive approach to regulation would likely quickly become outdated and ineffective, impeding innovation and limiting regulators' ability to protect consumers as technology evolves. Still, we believe that the Agencies should continue to coordinate with industry stakeholders to provide additional, specific guidance outside of the normal notice and comment rulemaking process that is focused on AVM testing and quality control that is clear, yet flexible. This would help promote innovative and responsible AVM development and implementation in a way that ensures greater consistency across regulated institutions.

The proposed principles-based approach to regulation would enable innovation while building a sustainable framework to reduce discrimination, advance fair lending and fair housing, and ensure accuracy in the home valuation process by requiring regulated entities to align their policies and procedures with promulgated principles. This approach also ensures accountability through the appropriate level of transparency, rigorous testing, standardized outputs, and consistent enforcement. With the implementation of proper quality control standards, users of AVMs can consistently and reliably make informed decisions about AVM quality and accuracy that matches their own risk tolerance given their use case.

We know that assessing and preventing bias and discrimination in valuations, particularly in automated valuations, requires deep and nuanced testing of data and methods that are industry or use case-specific. For example, existing methods of evaluating algorithmic fairness used in credit and lending situations should not be copied verbatim without a detailed examination of their workability in the valuation industry. Accordingly, the Agencies should facilitate further efforts to develop fair lending and fair housing testing standards for AVMs by making additional GSE data available to industry stakeholders, and by organizing hackathons, conferences, and encouraging academic research and similar engagements that leverage private sector expertise to inform ongoing guidance around AVM guidelines.

Scope of Proposed Rule and Definitions

While we understand that the scope of the rule is limited to covered AVMs, neither the occupancy status of a home (rental, second, primary) nor the purpose of an appraisal would affect AVM accuracy and should not create a barrier to AVM use. Therefore, while Zillow agrees with the scope of coverage within the rule as proposed, the Agencies should also encourage the voluntary application of the quality control standards established via this rule to the broadest possible range of AVM uses and types of dwellings. This will facilitate the most consistency in AVM quality outcomes across the industry.

Relatedly, the definitions proposed in the rule are generally appropriate. However, we believe that the broadest possible definition of *Principal Dwelling* should be adopted for these rules. We support the expansive interpretation of principal dwelling that would allow a consumer's new dwelling to be considered a principal dwelling if it will become their principal dwelling within one year. Further, *dwelling* should include as broad a range of residences as possible, as AVMs are commonly and effectively used to value all types of residential real estate, such as duplexes, condos, and other types of residences. While, for purposes of this rule, the definition of principal dwelling is limited by statute and corresponding regulations, we would encourage the Agencies to consider informal ways to ensure that the AVM standards created by this rule are adopted as broadly as possible to promote consistency and quality whenever AVMs are used.

Proposed requirements for the first four quality control factors

As articulated in the proposed rule, quality control standards should be sufficiently flexible to permit “[d]ifferent policies, practices, procedures, and control systems” that may be appropriate among a variety of institutions. We agree with the approach of establishing an overarching set of quality control standards that allow refinement over time as modeling technologies evolve.

While we believe that the proposed quality control factors are specific yet flexible enough to enable a range of covered entities to successfully implement the quality control standards, more focused guidance outside of this rule is warranted to address issues such as testing of AVMs and consideration of whether the use of pricing information in AVM models is appropriate. For instance, research has shown that, despite existing guidance being in place for over a decade, many AVMs may be influenced by the offering (listing price) set by home sellers and their agents.³ Listing price influence is just one example of how the measured accuracy of an AVM could be distorted and, at scale, introduce systematic risks into the mortgage credit system. To allow evolution of guidance and avoid unnecessary impediments to AVM adoption, any specific guidance should be provided in documents that can be easily and regularly updated to address this and other issues that may be identified over time as best practices for testing models evolve.

³ See discussion in <https://www.avmetrics.net/2022/01/25/latest-avm-testing-method/>

Specifying a nondiscrimination quality control factor

The existing four factors primarily address standards that would lead to an AVM being a credible, trustworthy, and accurate estimator of residential properties' market value (collateral value). These are important concerns as they lead to reliable appraisals of collateral to measure financial risk from a mortgage origination for borrowers, lenders, and the banking system as a whole. The nondiscrimination factor's focus is on the fair treatment of owners (or potential owners) of property and communities on protected class basis and the consequences that the models' predictions can have on certain protected classes as compared to others. Given this, we believe it is appropriate to examine nondiscrimination as a separate (additional) standard that works in parallel to the existing four that seek to ensure that AVMs used for mortgage origination are able to accurately assess collateral risk.

While we recognize that existing regulation and guidance promulgated under federal laws such as the Fair Housing Act and the Equal Credit Opportunity Act provide a solid foundation for nondiscrimination principles, Zillow believes that the inclusion of a fifth nondiscrimination factor for AVM models is appropriate and recognizes that inclusion of this factor serves as an important reminder to AVM developers and users about the necessity of fair lending and fair housing to a functional marketplace. As with the other four quality control factors, we strongly believe that a principles-based approach to a nondiscrimination factor is warranted. Further, we believe the Agencies should partner with industry and academia on continued research and investigation into how to best frame and test for potential discrimination.

We believe that AVM valuations of estimates of collateral value should not depend upon whether the buyer or seller of a home or their neighbors are members of a protected class. This is a simple principle to articulate, but could be challenging to operationalize into an evaluation framework that results in practical and impactful changes to AVM models. Broadly speaking, several areas of challenge exist when attempting to ensure nondiscriminatory AVM models: 1) the legacy of historically racist housing policies and community disinvestment; 2) use case-specific considerations; and 3) the two-sided nature of real estate transactions.

First, the continued legacy of historically racist housing policies and community disinvestment in the US housing market is difficult to disentangle from the data used to shape AVM models. It is well established that an AVM should not use independent variables such as the protected-class demographics of a neighborhood. But other variables that may correlate with legally protected characteristics, such as the local school catchment area or the latitude and longitude coordinates of a home, are often very important to the accuracy of an AVM. They also may reflect racial or ethnic-driven prejudice. Other factors, such as the presence of freeways near a neighborhood, may be the outcome of unfair or racist policies but may still be seen by current and future residents as material nuisances that make the location less desirable than neighborhoods that are

far from freeway noise and pollution. These types of variables are often both strong predictors of sales prices and potentially also correlated with protected characteristics. AVM developers would benefit from more guidance on when (if at all) it's appropriate to drop such data from a model.

Additionally, use case-specific distinctions in how an AVM is used and how a model was created may create challenges for assessing discriminatory impacts. For instance, one challenge to assessing fair lending and fair housing impacts for AVMs is that they are not like credit score models that predict individual behavior but, rather, models that aim to predict the aggregate preferences of buyers for any given location and home. This sets up a potential conflict between the aim of estimating accurate market valuations (i.e. collateral valuations) and fairness concerns if the preferences that drive the valuations are themselves the product of racial bias.

Lastly, the two-sided nature of real estate transactions creates difficulty for optimizing fairness across all parties. For example, undervaluation of homes in historically marginalized communities can lead to continued disinvestment and lack of economic mobility for home sellers who seek to profit off of their home equity. On the other hand, overvaluation can potentially burden home buyers who wish to purchase in those communities and create inflated tax assessments that are misaligned with the actual value of the home. Because both sides of the transaction need to be considered, regulatory structures must be developed with consideration for fairness for both buyers and sellers in residential real estate transactions. We believe that building expectations into existing regulatory frameworks for AVM providers to conduct third-party fairness audits could help achieve these protections.

Because there is not currently sufficient consensus applied to covered entities and other stakeholders concerning how an AVM should be evaluated with respect to fair lending, fair housing, and nondiscrimination, a principles-based approach to the nondiscrimination factor is best. This approach would account for the current level of uncertainty around an agreed upon method that any overly prescriptive approach would risk not adequately addressing nondiscrimination and could close off the active innovation and debate in this area prematurely.

Compliance Management Systems and Fair Lending Monitoring Programs

Lenders' existing compliance management systems (CMSs) and fair lending monitoring programs are currently very limited in their ability to assess whether a covered AVM applies different standards or produces disparate variations on a prohibited basis. AVMs tend to be proprietary models of third-party providers, and lenders often lack transparency into model design. Existing CMSs and fair lending monitoring, such as vendor management programs, model risk management programs, fair lending risk assessments, and collateral denial disparity analysis, can provide some assurance to lenders regarding the fairness of AVMs. To the extent

that these existing systems are insufficient, we believe those expectations would best come from proposed changes to interagency examination procedures that clearly set forth lender responsibilities in this context. Guidance regarding how to navigate expectations when access to information is limited and the ability to change providers is not an option or unduly burdensome would also be useful as lenders seek to ensure the fairness of third-party AVMs.

Conclusion

Ultimately, a transparent and flexible regulatory structure will allow companies to innovate and deliver AVM products and services to help address the challenges of a historically biased and often unfair housing market. A balanced, responsible regulatory approach will allow technology to bring new solutions to many issues facing consumers in their home buying or selling journey. Zillow has invested a great amount of time, expertise, and resources in these areas and will continue to do so on behalf of consumers. Zillow welcomes the opportunity to share the many learnings we have garnered from our work in this area and looks forward to partnering with policymakers and stakeholders on policies that promote ease, affordability, and security in housing for all Americans.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ken Wingert", with a small dash above the "i".

Ken Wingert
Director of Government Relations
Zillow Group