

# EAA Response to the European Banking Authority's consultation on "Draft Guidelines on loan origination and monitoring"

Brussels, 30 September 2019

## I. General Remarks

The European AVM Alliance (EAA) is a pan-European federation consisting of leading providers of Automated Valuation Models (AVMs). The EAA's main aim is to bring a consistent approach to automated valuations for residential property enabling the mortgage lending, investor, rating and regulatory communities to operate in a more transparent and effective way. To this end the EAA has published the first ever "European Standards for Statistical Valuation Methods for Residential Properties" in September 2017, followed by the second, independently peer-reviewed edition published in August 2019.

The EAA has carefully analysed the draft EBA Draft Guidelines on loan origination and monitoring and would like to congratulate the EBA for a well-conceived document.

As a federation of specialised providers of AVMs for the valuation of immovable property, our response concentrates on **Section 7. Valuation of immovable and movable property**, and the assessment of policy options in the area of **Valuation of immovable property collateral in the Accompanying documents** of the draft guidelines, thus including detailed answers to question 11.

We would be very happy to provide further information and explanation to the EBA and are available for a meeting at any point.

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## Question 11

### What are the respondents' view on the requirements for valuation of immovable and movable property collateral?

#### I. Executive Summary

The EAA very much welcomes the fact that the Draft Guidelines by the EBA for the first time introduce a distinction in terminology and thus in quality between “**advanced** statistical models” on the one hand and “**other** statistical models including indexation” on the other. To establish this distinction has been one of the main aims of the EAA since its foundation and we are glad that the EBA has adopted this distinction.

The specific qualities of **advanced** statistical models as prescribed by the draft guidelines in **§215** and **§216**, which the EAA fully supports and proposes to extend, are reflected in the only existing document setting out industry standards for the various statistical valuation models across Europe, i.e. the EAA’s “European Standards for Statistical Valuation Methods for Residential Properties”, which have been independently reviewed and approved by external academic experts, who are also RICS certified. According to these standards, only Comparables-Based AVMs fulfil the requirements for **advanced** statistical models as required by the EBA.

Unfortunately, the distinction between **advanced** and **other** statistical models is not applied consistently in the guidelines. In their current form, in particular regarding **§194** and **§195**, the guidelines categorically exclude the use of **advanced** statistical models for **origination**, while at the same time allowing the use of solutions that equally do not include an internal inspection (e.g. desktop or drive-by) and thus may not provide any greater degree of **verification** than advanced statistical models, while their **accuracy** is much less well scrutinised and understood.

The EAA understands that the use of advanced statistical models for origination – though **conforming with current EU legislation** – may not be allowed **categorically** in all jurisdictions from here onwards.

The EAA holds, however, that the final EBA Guidelines on loan origination and monitoring **should continue to allow the use of advanced statistical models for origination** in those jurisdictions where the following conditions are met:

- availability of **sufficient high-quality data**
- advanced statistical models **adhere to the highest technical standards**, e.g. the ESSVM by the EAA
- national legislation and regulation **do not exclude** the use of advanced statistical models for origination

- **long-established industry practices** clearly demonstrate that advanced statistical models have been used at origination **with great success and with positive effects for borrowers** and lenders.

Currently, these conditions are met in a number of EU and EEA jurisdictions, including the Netherlands, Sweden, the United Kingdom and Norway. It can be demonstrated that the use of advanced statistical models for origination **contributes to better risk management** and **does not** – contrary to the view expressed in the Accompanying documents section on Valuation of immovable property collateral (**p. 79-82**) – create shortcomings in the risk management from a prudential point of view.

The final EBA Guidelines **should continue to allow** the use of advanced statistical models for origination in these jurisdictions or otherwise this would have **severe detrimental effects** on the mortgage and property markets, e.g. on consumer choice and mortgage affordability.

## II. The use of advanced statistical models for monitoring and revaluation (Section 7.2.1)

In general, the EAA fully supports the proposed framework for monitoring and revaluation of immovable property collateral as laid out in Section 7.2.1 of the Draft Guidelines.

### A. Revaluation

The EAA accepts that while indices and other statistical models may be used for the purpose of **monitoring** (§207 – §209), particularly in circumstances where no other alternatives may be possible, only adequate **advanced** statistical models should be used for the purpose of **revaluation** (§210 ff.) and should fulfil the following criteria laid out in the Draft Guidelines:

- advanced statistical models should **account for the individual characteristics of the property** (§211 and §212)
- the advanced statistical models' market experience needs to be taken into account, as well as their ability to consider property-specific variables, their use of minimum available and accurate information and the **models' statistical precision**, or rather, technically more appropriate, their "**accuracy**" (§215)
- advanced statistical models should fulfil all criteria laid out in §216
- advanced statistical models should be based on **sufficient and accurate data** as laid out in §217

### Proposed changes to Chapter 7.2

Given the importance of accurate results in the context of the revaluation of immovable property collateral, in the view of the EAA these requirements should be **minimum** requirements. For these reasons the EAA would suggest the following extensions to § 210, §215 and §216:

#### §210

Institutions should have policies and procedures for the revaluation of immovable property collateral specifying the approaches to revaluation (e.g. desktop valuation, drive-by valuation, full visit with internal and external assessment of the property, **advanced** statistical models) for different types of immovable property collateral ensuring ~~ensuring~~ that such approaches are prudent and proportionate to the type and potential values of the collateral and in relation to the credit agreements. Furthermore, institutions should set out specific triggers indicating when monitoring leads to revaluation or a collateral needs revaluation.

## §215

Institutions' internal policies and procedures should indicate criteria for accepting advanced statistical model-based revaluations. These policies and procedures should account for statistical models' market experience, property-specific variables considered, use of minimum available and accurate information, and models' statistical ~~precision~~ *performance, taking into account the accuracy of the model, the reliability of its accuracy indicator (e.g. a confidence measure) and the availability of extensive testing and reporting of performance.*

## §216

Institutions should ensure that the advanced statistical models used for the purposes of revaluation of immovable property collateral are:

- a. property-specific;
- b. valid and accurate, and subject to robust back-testing;
- c. based on a sufficiently large and representative sample; ~~and~~
- d. based on up-to-date data of high quality; *and*
- e. including a confidence measure as output with each valuation result, thus providing a reliable indication of accuracy at a property-by-property level.*

## **B. Proposed Reference to the “European Standards for Statistical Valuation Methods for Residential Property”**

One of the perceived intentions of the EBA in these Draft Guidelines is to distinguish between **advanced** and **other** statistical models. As welcome as this distinction is, the Draft Guidelines do not fully provide the necessary clarity in describing the different characteristics and technical capabilities of the entire range of statistical models available.

Like RICS and TEGoVA have issued Europe-wide recognised European standards for surveyor valuations, which are referenced as such in the Draft Guidelines, the EAA has also issued the first and so far only European standards for Statistical Valuation Methods, which have been peer-reviewed by independent academic experts who are RICS certified and who are also Europe-wide recognised.<sup>1</sup>

These standards would bring further clarity into and would form a welcome reference point for the general provisions on the array of statistical models and approaches covered by the Draft Guidelines.

As an example the EAA would like to present the schematic overview of Statistical Valuation Methods included at the end of the ESSVM, which demonstrates that these standards fully reflect the requirements that the Draft Guidelines put on advanced statistical models that can be used for the purposes of revaluation, and gives an indication to lenders which models would not be appropriate to be used.

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<sup>1</sup> European Standards for Statistical Valuation Methods for Residential Property, 2<sup>nd</sup> Edition, August 2019

## Schematic Overview of Statistical Valuation Methods

	Considers individual location characteristics	Considers individual Property Characteristics	Can provide Confidence Measure with each individual valuation	Does not require Previous Value to estimate value	Values properties on a truly individual basis	Suitable for monitoring of market trends
House Price Indices	no/little, reliance on pre-defined areas	no, properties are grouped into broad categories	No	no	no	yes
Single Parameter Valuations		partly, only characteristics that have been quantified	Yes	yes	partly, heavy reliance on aggregations	yes, after conversion to HPI
Hedonic Models	yes, explicitly and implicitly	yes, explicitly and implicitly			yes	
Comparables Based AVMs						

### III. The use of advanced statistical models at the point of origination (Section 7.1.1)

Unlike in the context of the valuation of **movable** property collateral for origination (§201 – §206) – which the EAA welcomes –, the Draft Guidelines exclude the use of appropriate advanced statistical models for that purpose in the context of immovable property (§194 – §200).

Since the residential property market is larger, more homogeneous and counts many more transactions than most movable property markets, the EAA believes that appropriate **advanced statistical models can also be suitable for immovable property collateral**, as shown by established industry practices in a number of jurisdictions.

While the EAA agrees that not all types of statistical models should be used at the point of origination, the EAA holds that **advanced** statistical models **should not be excluded categorically** to be used for this purpose.

The EAA recognises that there are some jurisdictions where the use of advanced statistical models for origination at the current stage **is not yet advisable**. This is above all due to the **lack of availability of sufficient high-quality data** in some of these jurisdictions, but is also rooted in the fact that in some jurisdictions **national legislation does not allow** the use of advanced statistical models or in fact anything other than a full internal inspection (i.e. not even drive-by or desktop, which the draft EBA guidelines would now allow for the first time) for origination, e.g. in Spain.

There are many EU/EAA jurisdictions, however, where **high-quality data is available**, among them those where **established market practices** have clearly demonstrated that advanced statistical models can **successfully be used for origination**, including the Netherlands, Sweden, the United Kingdom and Norway.

In fact, if in these jurisdictions the use of advanced statistical models for origination were to be made impossible by the EBA guidelines, this would result in a break-down of the property and mortgage markets, given that in these jurisdictions there are insufficient numbers of qualified appraisers who could undertake the valuation of immovable property for origination.

Recognising that there is no one-size-fits-all solution for all EU/EAA jurisdictions, the EAA proposes to the EBA **to allow the (continued) use of advanced statistical models for origination** in those jurisdictions where the following conditions are fulfilled:

- availability of **sufficient high-quality data**
- advanced statistical models **adhere to the highest technical standards**, e.g. the ESSVM by the EAA
- national legislation and regulation **do not exclude** the use of advanced statistical models for origination



- **long-established industry practices** clearly demonstrate that advanced statistical models have been used at origination **with great success and with positive effects for borrowers** and lenders.

The EAA has carefully analysed the reasons for the current categorical exclusion of the use of advanced statistical models for origination laid out on p. 79-82 of the Draft Guidelines. In order to substantiate the proposal by the EAA to allow advanced statistical models for origination under the conditions laid out above, and to demonstrate that the qualities and capabilities of advanced statistical models **do not**, in fact, create shortcomings in the risk management from a prudential point of view, the EAA would like to address the individual points made by the EBA.

#### **i. Current usage of advanced statistical models at origination in the EU and the EEA**

As the EBA rightly states, advanced statistical models are successfully used in a number of EU and EEA jurisdictions for the valuation of immovable property for origination. These usages are in full accordance with national legislation and are allowed by the national supervisory authorities in these jurisdictions, including the Netherlands, Sweden, the United Kingdom and Norway.

The EAA can only comment on the use of Comparables-Based AVMs as the most advanced statistical model available, and can demonstrate that in the jurisdictions where these are used, they in fact contribute to -rather than create shortcomings in- the risk management of lending institutions.

#### **ii. EU regulatory landscape**

The use of advanced statistical models for mortgage origination conforms fully to all existing EU legislation, including the **Mortgage Credit Directive (MCD)** and the **Capital Requirement Regulation (CRR)**. Likewise, it conforms to all existing EBA guidelines, including that on non-performing and forborne exposures.

Regarding international and European valuation standards, again the use of some advanced statistical models (namely Comparable-Based AVMs) at origination conforms to those issued by RICS. The only standards, that explicitly disallow the use of statistical methods at origination, without making any distinctions between advanced and other, are TEGoVA's EVS. However, these standards have no binding force and originate from a segment of the valuation industry that lacks expertise with regard to statistical valuation methods in general and the technical abilities of advanced statistical methods in particular.

The EAA is happy to share an independent legal assessment regarding the conformity of the use of statistical models with EU legislation.

### iii. Prudential point of view

While acknowledging that the use of advanced statistical models may be beneficial to institutions and that a restriction on the use of such models may hamper the development in this market and the overall progress of the valuation market, the EBA holds that from a prudential point of view the use of statistical models for mortgage origination

- may create shortcomings in the risk management
- might not ensure a reliable value attributed to the underlying assets and therefore a robust valuation process
- might have an insufficient level of transparency,
- might lack adequate governance
- might not ensure that the valuation is based on well-established and transparent market information coming from reliable sources

The EAA agrees that these statements are accurate if and only if any statistical models that may be used are not adequate, do not have sufficient high-quality data available, do not adhere to the highest possible standards and thus do not provide suitable performance, in terms of demonstrable accuracy and reliability of a suitable accuracy indicator accompanying each result.

However, today there are advanced statistical models, in particular Comparables-Based AVMs, in the markets of some EU/EEA jurisdictions that do have all of these qualities and thus address all of the very points that the EBA is making here.

It is therefore important to allow for these types of advanced statistical models to continue to be used for mortgage origination in these markets, since in addition to the property valuation they also provide a reliable indication of accuracy, which is a predictive measure (given on a prescribed scale) expressing the estimated accuracy of each result.

In those cases where the accuracy is inadequate, the institution should not rely solely on the result from the statistical model. However, in those cases where the accuracy is adequate, a valuation solely based on an advanced statistical model can be relied upon. For these advanced statistical models, it is important to constantly monitor performance in great detail.

All required characteristics and standards of adequate advanced statistical models to be used for mortgage origination are already described in the EAA's "European Standards for Statistical Valuation Methods for Residential Property" (ESSVM) and are included in the list of requirements for advanced statistical models used for the purpose of revaluation in §§212-217 of the Draft Guidelines.

## **Proposed amendments to the guidelines**

In order to enable the continued use of advanced statistical models for mortgage origination in those jurisdictions where this has been proven successful from a prudential point of view, **and to guarantee that only appropriate advanced statistical models** are used that are of the highest technical standards, the following amendments are proposed:

### ***1. Proposed changes to Chapter 7.1***

#### **§193**

Institutions should ensure that the property collateral is valued in accordance with applicable international, European and national standards, such as European Group of Valuers' Associations (TEGoVA) European Valuation Standards and the Royal Institute of Chartered Surveyors (RICS) standards, ***or the European AVM Alliance's (EAA) European Standards for Statistical Valuation Methods for Residential Properties.***

#### **§194**

At the point of origination institutions should ensure that the value of all immovable property collateral irrespective whether it is pledged against the loans to consumers or professionals is assessed by an independent qualified internal or external valuer, ***including appropriate advanced statistical models taking into account the accuracy of the model, the reliability of its accuracy indicator (e.g. its Confidence Level) and the availability of extensive testing and reporting of performance.***

#### **§195**

Institutions should set policies and procedures specifying the approaches to be used (e.g. desktop, drive-by, full visit with internal and external assessment of the property, ***or an appropriate advanced statistical model***) for different types of immovable property collateral ensuring that such approaches are prudent and proportionate to the type and potential values of the collateral and in relation to the credit agreements. For the valuation of an immovable property, institutions may consider using desktop, drive-by valuation ***or appropriate advanced statistical model*** approaches only in the cases of valuing or revaluing immovable property collateral (e.g. RRE and CRE) that is of similar design, specifications and characteristics to the ones already valued or re-valued , e.g. similar apartments in the same apartment block.

## **2. Proposed additions to Chapter 7.1**

The EAA considers the following additions necessary to ensure that only appropriate advanced statistical models are used for origination. They accurately reflect the regulatory framework and established industry practices of those jurisdictions where advanced statistical models are currently used for this purpose with great success.

These additions are also intended to address explicitly the concerns expressed by the EBA on p. 79-82 of the Draft Guidelines.

The EAA is happy to engage with the EBA to amend the final formulation of these provisions and to discuss where these may be best placed.

### **§195a new**

*When using advanced statistical models for mortgage origination, institutions' internal policies and procedures should clearly indicate criteria for accepting valuations based on advanced statistical models for mortgage origination. These policies and procedures should account for the statistical models' market experience, the property-specific variables considered, the use of minimum available and accurate information, and the models' statistical performance, taking into account the accuracy of the model, the reliability of its accuracy indicator (e.g. a confidence measure) and the availability of extensive testing and reporting of performance.*

### **§195b new**

*Institutions should ensure that the advanced statistical models used for the purposes of valuation of immovable property collateral for mortgage origination are:*

- a. property-specific;*
- b. valid and accurate, and subject to robust back-testing;*
- c. based on a sufficiently large and representative sample;*
- d. based on up-to-date data of high quality;*
- e. including a confidence measure as output with each valuation result, thus providing a reliable indication of accuracy at a property-by-property level; and*
- f. not excluded by national legislation or regulation*

## §195c new

*Institutions should have adequate IT processes, systems and capabilities in place and sufficient and accurate data for the purposes of any statistical model-based valuation of immovable property collateral for mortgage origination.*

### 3. Amendment of Table 1 on p.81

As a consequence of some of the changes and clarifications proposed by the EAA in the entire response, **Table 1: Use of advanced statistical models for the purpose of valuation of immovable property collateral** on p.81 of the Accompanying documents section of the Draft Guidelines, the following amendments to the table is proposed.

Valuation by	Initial valuation		Re-valuation		Monitoring
	<i>No Availability of data ex §195</i>	<i>Availability of data ex §195</i>	Art. 208 (3) applies	Art. 208 (3) does not apply	
<b>Valuer – Full valuations</b>	√	√	√***	√	√
<b>Advanced statistical models &amp; Valuer Desktop or Drive by valuations</b>	X	√	√***	√	√
<b>Other statistical models including indexation</b>				X	√

\*\*\* A statistical model “cannot be used as a sole means of undertaking the review of the property valuation” implies that, *for example, a valuation produced by* an advanced statistical model checked by a valuer is eligible