EAA Response to the European Banking Authority’s consultation on “Guidelines on management of non-performing and forborne exposures”

Brussels, 8 June 2018

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 about 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. In that vein the EAA has published the first ever “Standards for statistical valuation methods for residential property in Europe” in September 2017.

The EAA has carefully analysed the draft EBA Draft Guidelines on management of non-performing and forborne exposures and would like to congratulate the EBA for a well-conceived document.

As a federation of specialised providers of Automated Valuation Models (AVMs) for the valuation of immovable property, our response concentrates solely on chapter 9 of the Draft Guidelines and includes detailed answers to questions 9. and 10.

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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II. Clarification on Collateral Valuation Methods for Immovable Property

Careful analysis of the proposed text for chapter 9 has led the EAA to the conclusion that there are a number of terms and definitions with regard to different valuation solutions for the collateral of NPEs which lack clarity and appropriate distinctions and in some instances are even misleading. In the EAA's opinion these need further clarification.

In particular clarifications are necessary regarding:

- the currently implied and technically misleading sub summation of "other automated processes" under the category of "indexed valuations" in the Draft Guidelines (paragraphs (204) and (205))
- the current lack of clarity and potentially misleading use of the terms "property specific" and "individual valuations" in the Draft Guidelines (paragraphs (203) – (205)
- the resulting potential exclusion of high-quality statistical methods, namely Comparables-Based AVMs, as an additional possible tool for "property specific" or "individual valuations" in the Draft Guidelines
- the arbitrary figure of 300,000 EUR as a threshold for allowing the use of indices and other automated processes for revaluation in the Draft Guidelines

In order to achieve greater clarity in these areas, it is necessary as a first step to briefly lay out explicitly the three different fundamental types of property valuations. Since the Draft Guidelines contain the criterion of "individual valuations" (9.1.3) – a point which will be addressed separately in greater detail by the EAA in this response – the three valuation types and their respective subcategories are also distinguished by whether or not they fulfil that criterion. In addition, as the EAA is advocating the clear inferiority of the third type of property valuations set out here but is not advocating the equivalence of the first two, the key criterion that can distinguish them, i.e. the ability to enter a property to check its condition, is also captured.

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Valuation types	Individual Valuations		Non-property-specific Valuations
	Internal	Not internal	
Appraiser valuations	Full internal appraisals	Drive-bys and Desktops	Beacon valuations
AVMs	No	Comparables-Based AVMs	Other models, e.g. hedonics
Indexed valuations and other automated processes	No		Yes

A. Appraiser valuations

Valuations undertaken by a qualified appraiser

A.1 Full internal appraisal: “individual” / property-specific valuation produced following the full internal (!) physical inspection of a property (hence checking its condition) and based on the selection of appropriate comparables.

A.2 Drive By: “individual” / property-specific valuation produced after only viewing the exterior of a property.

A.3 Desktop: “individual” / property-specific valuation produced without visiting the property.

A.4 Beacon valuation: non-property-specific valuation produced by applying the principle that large groups of properties of similar age, type or other, may be valued by valuing just one “beacon”, e.g. the most frequently occurring type of dwelling within the group, and assuming it is representative of the value of every other property as well.

B. AVM Valuations

Valuations undertaken by an Automated Valuation Model (AVM), a system that provides an estimate of value of a specified property at a specified date, using mathematical modelling techniques in an automated manner

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B.1 Comparables-Based AVM: "individual" / property-specific valuation produced by a sophisticated model that selects a bespoke set of appropriate comparables for each individual property being valued, similar to "individual" appraisers' valuations (see above).

B.2 Other models (e.g. hedonics): Generic statistical valuation produced using mathematical modelling techniques in an automated manner, but treating entire segments of properties in the same manner, e.g. applying generic localised area parameters, hence not (!) property-specific.

C. Indexed valuations

Valuations produced by a simple computation that applies a House Price Index to a previous property value in order to update it to a subsequent point in time.

One of the central points of this overview at this stage is to emphasise that Comparables-Based AVMs provide "individual valuations" using sophisticated modelling techniques that select a bespoke set of appropriate comparables for each individual property being valued. This selection of bespoke comparables is the same approach as taken in appraiser valuations.

All further clarifications proposed by the EAA in its response are based on the distinction between these valuation types and will be referred to at several places.

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III. EAA Response

Question 9 – Do you have any significant objection against the proposed threshold for property-specific valuation (EUR 300,000)?

The EAA understands that the threshold is introduced to exclude those valuations for non-performing exposures of more than 300,000 EUR in gross value, **which are purely derived from using an index**. In fact, the EAA would recommend excluding **pure indexed valuations** also for NPEs of less than 300,000 EUR.

The reason is that there are indisputable and demonstrable disadvantages in a purely indexed valuation, one of which is that **it is not property-specific** (see also II. above).

In addition, a threshold of 300,000 EUR cannot be applied consistently throughout all jurisdictions in the EU and the EAA, since loans of less of 300,000 Euro in gross value, which are secured by immovable property collateral, may be considered high or even very high in some jurisdiction, while in other jurisdictions they may be considered to be average or even low. Therefore, the EAA would recommend to leave thresholds to be introduced at national level and allow these to be below or above the recommended value.

Beyond that banks should be given the possibility to use those valuation methods that provide the best-suited approach to each valuation case. Thus rather than introducing an arbitrary threshold, the Draft Guidelines should allow the use of property-specific valuation methods, including automated processes that provide property-specific valuations, such as e.g. Comparables-Based AVMs, in jurisdiction where these are available and have been widely used for that purpose, independent of the gross value of the NPE.

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Question 10: Do the requirements for valuation of movable property collateral capture all relevant aspects?

The EAA is aware – as the EBA has confirmed during the public hearing on the Draft Guidelines on 25 April 2018 – that the provisions in chapter 9.3.1 and in particular in paragraphs (204) and (205) are primarily aimed at reducing the use of indices as a valuation method because of the disadvantages inherent in their use, with which the EAA fully agrees for the reasons stated below.

At the same time the EBA also confirmed that it is not the intention to hamper or even exclude the use of other statistical processes used in other automated processes for valuation that provide high-quality, property-specific valuation results, such as Comparables-Based AVMs, and have successfully been used by banks and investors for property-specific valuations in the context of NPEs in a large number of jurisdictions, including the UK, the Netherlands, Italy, Germany, Sweden and Norway.

If, however, paragraphs (204) and (205) stay the way the Draft Guidelines propose, these other automated processes may inadvertently be affected and not able to be used any longer.

The EAA would therefore ask the EBA to restrict the definition of "indexed valuations" strictly to the use of indices and not include generally all "other automated processes" in order to prevent this unintended consequence.

This would also be in line with the provisions in Article 208(3) of the CRR which specifically states that "institutions may use statistical methods to monitor the value of the immovable property and to identify immovable property that needs revaluation", and which is referred to in the Draft Guidelines as well (in paragraphs (202) and (207)).

In fact, the EBA already considers AVMs to be a valid method for revaluation of immovable property collateral in the context of a harmonised covered bond frame.[1]

Likewise, those automated processes that provide property-specific valuations, such as Comparables-Based AVMs, should be included in the property-specific appraisal methods, providing individual valuations under the scope of the Draft Guidelines.

[1] EBA report on covered bonds: Recommendations on harmonisation of covered bond frameworks in the EU; EBA-Op-2016-23, p. 51 (published 20 December 2016)

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Paragraph (204)

i.

The EAA fully endorses the EBA's desire to promote individual valuations wherever possible, as property-specific valuations are typically more accurate and reliable than those applying the same treatment to large groups of properties or without the actual selection of appropriate comparables.

It is however critical to recognise that new, automated valuation solutions exist in the form of AVMs that incorporate a Comparables-Based approach, whereby individual valuations can be achieved by an automated process. This solution should be allowed by the Draft Guidelines as an alternative to individual valuations by an appraiser in those jurisdictions where Comparables-Based AVMs are available.

ii.

Paragraph (204) states that "property-specific appraisals, conducted through individual valuations and revaluations, should be performed by an appraiser and the valuation should not be based on indexation or and other automated process." The use of the terms "property-specific appraisals" and "individual valuations" are put in incorrect – and unintended – juxtaposition to automated processes.

Property-specific appraisals take into account the characteristics of the property to be valued by selecting appropriate comparables. With indexation no such selection takes place. Instead indexation applies a simple calculation with pre-calculated parameters to all properties within a given group, e.g. in a given geographic area (a similar approach is taken also by hedonic models, where individual property characteristics are taken as an input but the calculation that produces the value is based on a set of pre-calculated parameters that are bound to fixed categories and geographic areas).

There exist, however, other solutions that can perform valuations of properties on a strictly "individual", property-specific basis as set out in the Draft Guidelines

a) without necessarily being deployed "by an appraiser", and

b) in fact possibly being deployed within an "automated process" other than indexation, hedonics or other generic statistical method.

This is the case for AVMs that incorporate a Comparables-Based approach, whereby a bespoke set of comparables is selected for each individual subject property being valued. Methodologically, this is in fact the same approach as taken by an appraiser, the only difference being that the selection of the relevant comparables is not based on human – and therefore potentially subjective – judgement, but on state-of-the-art Artificial Intelligence solutions.

An "individual valuation" can therefore be made by an appraiser or, as an alternative in those jurisdictions where they are available, by using a Comparables-Based AVM. In

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addition, appraisers themselves may make use of Comparables-Based AVMs in those jurisdictions.

Paragraph (205)

Paragraph (205) defines “indexation or any other automated processes” as “indexed valuations”. To define all “automated processes”, in particular, Comparables-Based AVMs (see General Remarks above), as “indexed valuations” and to subsume them under this category is technically and methodologically misleading, especially in terms of quality of the valuation results, and also semantically wrong. Therefore, further clarification in the Draft Guidelines is needed.

Differences between statistical methods deployed in automated processes

The EAA is fully aware that there is still very little awareness among stakeholders (including regulators, legislators, lenders and investors) of the technical as well as the quality differences between the different statistical valuation methods that can be deployed within an automated process. To clarify these differences and to emphasise the unique characteristics in terms of quality, transparency, objectivity, accuracy and reliability of valuations obtained from Comparables-Based AVMs is therefore one of the central aims of the EAA.

Potential problems with pure Indexed valuations

The EAA fully agrees with the EBA’s recommendation in the Draft Guidelines to exclude valuations for non-performing exposures of more than 300,000 EUR in gross value, which are purely derived from using an index. In fact, the EAA would recommend excluding pure indexed valuations also for NPEs of less than 300,000 EUR.

The reason is that there are indisputable and demonstrable disadvantages in a purely indexed valuation, which include:

- An index is merely an average house price development for a typically large regional area; as a result, discrete locations within this area can show vastly different house price developments compared to the average that the index suggests.
- An index requires a previous property value; as a result, any bias and inaccuracies included in this previous valuation, which in the worst case may even include fraudulent intent or excessive optimism that might have been present in the valuation at origination, will be forever carried forward in an indexed valuation
- An indexed valuation has no reliability indicator or Confidence Level and thus lacks a predictive measure expressing the estimated accuracy of each valuation. This is of particular importance when valuing unique or non-standard properties since these are much harder to value than standard properties and should potentially not be relied upon.

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Due to the above, indexed valuations of immovable properties are prone to carrying a high degree of uncertainty, inaccuracy and bias.

Advantages and technical differences of AVMs vis-á-vis pure indexed valuations

- An AVM does not require a previous property value as input and thus does not carry forward forever any bias, fraud or excessive optimism that might have been present in the original valuation
- An AVM is able to value properties where no previous transaction is known to the party requiring the valuation, thus making up for any missing, misguided or deliberately misleading data within the mortgage book
- An AVM is demonstrably more accurate and therefore more reliable than the traditional revaluation methodology through indices. This can be shown in a simple and scientific manner through extensive empirical tests, which are in fact regularly conducted by all EAA members on large property data samples from various European jurisdictions. Their detailed results can of course be obtained upon request.
- An AVM includes a Confidence Level as additional output with each valuation result, thus providing risk managers with an indication of accuracy at a property-by-property level and allowing them to achieve much greater granularity in their models than with any other approach. Unique or non-standard properties are harder to value than standard properties, which would typically result in a low Confidence Level, whereas they would raise no alerts when using indexation. This, however, is very important information for the user of the valuations, in terms of risk assessment and as an indication of how much reliance they can place on the valuations itself.

Confidence Levels also form the basis of the Rating Agencies' published treatment of AVMs, resulting in much lower "haircuts" than those applied to indexed valuations.

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