

EBA/DC/2016/145
21 March 2016

# **Final Report**

on the Decision of the European Banking Authority specifying the benchmark rate under Annex II to Directive 2014/17/EU (Mortgage Credit Directive)



# **Contents**

1. E	executive Summary	3
2. B	Background and rationale	5
	Decision of the European Banking Authority specifying the benchmark rate under Annex II to Directive 2014/17/EU (Mortgage Credit Directive)	12
4. A	Accompanying documents	19
4.1	Cost-benefit analysis / impact assessment	19
4.2	Views of the Banking Stakeholder Group (BSG)	26
4.3	Feedback on the public consultation and on the opinion of the BSG	26



## 1. Executive Summary

Directive 2014/17/EU on credit agreements for consumers relating to residential immovable property (the Mortgage Credit Directive or 'MCD') aims to develop a more transparent, efficient and competitive internal market, through consistent, flexible and fair credit agreements relating to immovable property, while promoting sustainable lending, borrowing and financial inclusion, and hence providing a high level of consumer protection.

The MCD specifies the information that creditors should provide to consumers including personalised information in order to enable the consumer to compare and reflect on the characteristics of credit products. The MCD requires creditors to provide this pre-contractual information to the consumer in the form of the European Standardised Information Sheet (ESIS), and that the creditor should calculate illustrations of the annual percentage rate of charge (APRC), and of a maximum instalment amount 'based on the highest value of any external reference rate used in calculating the borrowing rate where applicable or the highest value of a benchmark rate specified by a competent authority or EBA where the creditor does not use an external reference rate', in certain circumstances.

While the EBA is not a rate-setting authority, and as such has not previously specified a benchmark rate that can be used by creditors, to give effect to the required rate under the MCD, it has developed a formula with which creditors are to calculate the rate. By producing a formula instead of a single rate, the EBA seeks to ensure that its rate is representative of national circumstances. As input, the formula uses an underlying rate that is specific to each Member State, either the European Central Bank (ECB) rate for Eurozone countries or the Member State's central bank rate for non-Eurozone countries. The EBA's formula was subject to a six-week consultation period between October and November 2015. The EBA received four responses. The Feedback Statement includes a summary of the comments received and the EBA's feedback to those responses.

Respondents agreed with the EBA's proposal to produce a formula, rather than to set an absolute rate. However, some respondents commented on the proposed formula for calculating the benchmark rate, and some on the choice of the underlying rates. One respondent questioned the inclusion in the formula of a deduction of the lowest value of the underlying rate. The EBA clarifies that the formula deducts the lowest value of the underlying rate from the highest value of the underlying rate because, without such a deduction, the formula would double count the funding costs. This follows because the borrowing rate will in part reflect the funding costs for which the underlying rate information is a proxy. Another respondent suggested alternatives for the rates to be used as underlying rates for the formula. The EBA assessed those and concludes that the alternatives proposed are not superior when assessed against the reliability criterion.

After assessing all the comments and alternatives suggested by respondents, the EBA concludes that both the formula developed by the EBA and the choice for the underlying rates ensure the



achievement of the aim of the calculations of the illustrative example of the APRC and a maximum instalment.

## Next steps

The Decision will be translated into the official EU languages and published on the EBA website, and in the Official Journal of the European Union.



# 2. Background and rationale

## 2.1 Background

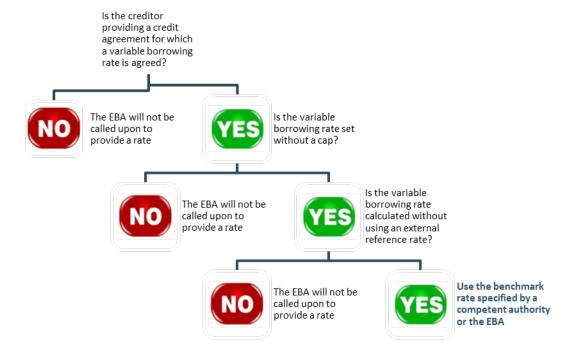
- Directive 2014/17/EU on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No 1093/2010 (the Mortgage Credit Directive, or 'MCD') was adopted on 4 February 2014 and published on 28 February 2014. The deadline for Member States to transpose the provisions of the MCD into national law is 21 March 2016.
- 2. The MCD aims to develop a more transparent, efficient and competitive internal market, through consistent, flexible and fair credit agreements relating to immovable property, while promoting sustainable lending and borrowing and financial inclusion, and hence providing a high level of consumer protection (Recital 6 of the MCD). To that end, the MCD specifies the information that creditors should provide to consumers. The MCD states in Recital 40 that the consumer should receive personalised information in good time prior to the conclusion of the credit agreement so they are able to compare and reflect on the characteristics of credit products.
- 3. The MCD specifies further that personalised pre-contractual information should be provided by the creditor to the consumer so that the consumer can compare the credits available on the market, assess their implications and make an informed decision on whether to conclude a credit agreement. Article 14 of the MCD sets out the requirements for the pre-contractual information that should be provided to the consumer in the form of the ESIS. Furthermore, Part A of Annex II to MCD sets out the model for the ESIS and specifies the text that should be included in the ESIS. Part B of the same annex sets out the instructions that should be followed as a minimum when completing the ESIS.
- 4. Two of the categories of information that the creditor should provide to the consumer in the ESIS are information about the interest rate and other costs, and about the amount of each instalment (Sections 4 and 6 of the ESIS, respectively). In Section 4 of the ESIS, the MCD provides that, if the mortgage features a variable rate, the creditor should provide an illustrative example to show the potential impact of rate variability on the APRC. The illustrative example of the APRC shall accompany a warning that the variability of the borrowing rate could affect the actual level of the APRC. The MCD also provides that Section 6 of the ESIS shall include an illustrative maximum instalment amount, which again shows the potential impact of the variability of the borrowing rate. The illustration of a maximum instalment amount shall accompany a statement indicating that the borrowing rate is variable.
- 5. Part B Annex II to MCD sets out the instructions for how the creditor should calculate the illustrative example of the APRC (Section 4(2)) and the illustration of the instalment amount



(Section 6(4)). In both cases, the MCD specifies that the creditor should calculate the illustrations using the highest level of a cap on the borrowing rate, or where there is no cap, the highest borrowing rate in at least the last 20 years or the longest period for which data is available, or 'based on the highest value of any external reference rate used in calculating the borrowing rate where applicable or the highest value of a benchmark rate specified by a competent authority or EBA where the creditor does not use an external reference rate.'

6. The implication of these MCD provisions is that, from the transposition date of the MCD of 21 March 2016 onwards, the EBA may be called upon by creditors in the European Union (EU) to provide an EBA benchmark rate. Figure 1 illustrates the circumstances in which a creditor may rely on the EBA benchmark rate to produce the illustrations required in Annex II to MCD.

Figure 1: The circumstances in which a creditor may rely on the EBA benchmark rate



7. As Figure 1 shows, an EBA benchmark rate will not be required by all creditors when creating the necessary illustrations in the ESIS. Rather, the EBA benchmark rate will only be required in specific circumstances as a fall-back rate where other criteria have not been met.



#### 2.2 Rationale

- 8. The EBA is not a rate-setting authority, and, as such, has not previously specified a benchmark rate that can be used by creditors. Therefore, in order to be able to provide relevant creditors with a rate, the EBA assessed how to develop a benchmark rate for the purposes foreseen in the MCD, i.e. to calculate the illustrative example of the APRC and the illustrative instalment amount for the ESIS.
- 9. The MCD does not, however, specify how the EBA should develop its benchmark rate or what that rate should be based on, i.e. the underlying rate. In deciding amongst various options on the most suitable approach to produce the required rate, the EBA first reflected on the purpose of the two illustrations in the ESIS, which is to illustrate to consumers the potential impact of the variability of the borrowing rate. In order to ensure that the purpose of the illustrations is achieved, the EBA benchmark rate should therefore be representative of the national experience of the variability of borrowing rates so that the illustrations will resonate with consumers.
- 10. The EBA identified three potential approaches to the benchmark rate foreseen in Annex II to MCD:
  - Option 1: Specify a single EBA benchmark rate that would be applicable in all Member States that do not specify their own rates. This would result in one generic rate for all relevant Member States.
  - Option 2: Specify a rate for each Member State that does not specify their own rate. The EBA would therefore specify an individual, bespoke rate for each Member State that does not specify its own national rate.
  - Option 3: Specify the methodology from which creditors can calculate the
    rate themselves. The EBA would therefore not specify a rate but would
    instead specify the rate calculation methodology, i.e. a formula. The formula
    would require variable as opposed to fixed input, so creditors would have to
    input data themselves into the formula to create the benchmark rate. In
    addition, the methodology would rely on one specified underlying rate for
    each Member State, so in effect a bespoke rate would be produced for each
    Member State.
- 11. The EBA evaluated and assessed each option as follows:
  - Availability and reliability of the data to calculate the rate: the EBA would
    ideally want to use an underlying rate in each Member State that is reliable
    and for which historical data is readily available. All three of the options
    would facilitate such an approach.



- Representativeness for consumers of the illustrations produced using the EBA benchmark rate: Option 1 will produce a single generic rate that cannot be representative for all Member States. The representativeness of Options 2 and 3 is higher than the 'one rate for all' option (Option 1) because they are based on a locally used underlying rate, but the methods do not take account of the funding costs and other costs that creditors include in the borrowing rates charged to consumers.
- Methodological robustness of the calculated rate: With Option 3, the EBA benchmark rate would always be up-to-date because it should be calculated by creditors at the time when they need to use it. This would not be the case for Options 1 and 2, as the EBA benchmark rate would not be updated on a daily basis.
- Compliance costs for creditors and competent authorities that will accrue as a
  result of having to calculate the rate themselves: It is unlikely for any of the
  three options that creditors will incur additional costs over and above the
  costs that they will incur for calculating the illustrations.
- Costs for the EBA for developing and updating the rate: The costs for the EBA as a result of Option 3 will be less than those of the other two options because with Options 1 and 2 the EBA would need to regularly update the benchmark rate, whereas with Option 3 the formula will produce an up-to-date rate each time it is used. The formula will include 'built-in' future-proofing.
- 12. Given the assessment above, the EBA has concluded that it would be preferable to produce and publish a formula to calculate the EBA benchmark rate, rather than an actual rate, i.e. Option 3 is the most suitable option. It then considered how it would develop such a formula, including the underlying rate on which to base the EBA benchmark rate as well as the actual formula to calculate the rate.

#### **Underlying rate**

13. As the purpose of the EBA benchmark rate is to provide a rate in scenarios in which the creditor is not using an external reference rate, the time period for the underlying rate should mimic the time period set out in Annex II to MCD (i.e. for scenarios in which a creditor is using an external reference rate). The implication would be that the EBA benchmark rate would be based on the underlying rate for the 20 years before the ESIS is provided by the creditor to the consumer. However, if data on the underlying rate is only available for a period of less than 20 years, then the longest period for which such data is available should be used. In its formula, the EBA sets the earliest start date of the 20-year period from the earliest date on which the underlying rate in all Member States is available. This ensures that the EBA



benchmark rate is calculated consistently across the EU, as the same historical time period will be used in all Member States.

- 14. As a next step, the EBA considered various underlying rates to identify the most suitable option that would be used for the calculation of the EBA benchmark rate. The following evaluation criteria were considered by the EBA when identifying the suitable underlying rate:
  - the underlying rate, including its historical data, should be easily available to creditors, for example, via a public website;
  - the underlying rate should be reliable; and
  - the underlying rate should be representative of the mortgage market in the respective Member State.
- 15. The EBA considered the suitability of two potential rates:
  - Rate Option 1: Existing reference rates for Eurozone Member States, this would be the ECB Main Refinancing rate; for non-Eurozone Member States, this would be the national central bank refinancing rate or the equivalent national central bank rate. Historical data for the ECB Main Refinancing rate is available from the ECB's website<sup>1</sup> from 1 January 1999. Similarly, historical data for the national central bank rates is available on the website of each national central bank in non-Eurozone Member States for more than 20 years.
  - Rate Option 2: Average variable mortgage rates the ECB collects information from Member States (Eurozone and non-Eurozone) about average mortgage rates and collates and publishes this data on the website of the ECB's Statistical Data Warehouse. The ECB's Statistical Data Warehouse contains a number of rate categories under the heading of A22 Lending for House Purchase. The rate category 'up to one year initial rate fixation' includes variable rates (where there was no initial fixed-rate period). This information is available for 31 countries, but there are some gaps in the time series of data available for some Member States.
- 16. The EBA assessed each of the two rate options against the three evaluation criteria and concluded that rate Option 1 - the use of an existing external reference rate - was the most suitable underlying rate, because it will produce an EBA benchmark rate in each Member State that will be representative of the local mortgage market and for which historical data is consistently available for all Member States.

http://www.ecb.europa.eu/stats/monetary/rates/html/index.en.html

<sup>&</sup>lt;sup>2</sup> Paragraph 4 of Section 7.7.4,

http://www.ecb.europa.eu/pub/pdf/other/mfiintrestratestatisticsmanualen.pdf?a0198ee1f9e0fa650ec38504f4ab6470



- 17. As historical data on the ECB Main Refinancing Rate is only available from 1 January 1999, the EBA will set the earliest start date of the 20-year historical period from 1 January 1999 for the calculation of the EBA benchmark rate in all Member States. This means that a historical period of less than 20 years will apply when the EBA benchmark rate is calculated in the period from 2016 to 31 December 2018. Thereafter, historical rates will be available in all Member States for a period of 20 years. So, for example, if the EBA benchmark rate is calculated in 2016, the underlying rate will be sourced from the historical period 1999 to 2016, i.e. a 17-year historical period. Similarly if, for example, the rate is being calculated in 2020, the underlying rate will be sourced from the time period from 2000 to 2020, i.e. a 20-year historical period.
- 18. The underlying rate to input into the formula to calculate the EBA benchmark rate will be the underlying rate applicable to the Member State in which the ESIS is provided to the consumer. For example, if the consumer is provided with the ESIS in Member State A but the mortgage offered to the consumer is denominated in the currency of Member State B, then the relevant underlying rate to input into the formula to calculate the EBA benchmark rate is the underlying rate of Member State A. Similarly if, for example, the ESIS is provided to the consumer in Member State A but the creditor offering the mortgage to the consumer is passporting into Member State A from Member State B on a 'freedom to provide services' basis then the relevant underlying rate to input into the EBA formula is the underlying rate of Member State A. In all cases, the relevant underlying rate is the underlying rate of the Member State in which the ESIS is provided to the consumer.

#### Formula to calculate the EBA benchmark rate

- 19. After the EBA identified the most suitable underlying rate on which to base the EBA benchmark rate, it then considered options for the formula to calculate the EBA benchmark rate. In developing the formula, the EBA again reflected on the purpose of the MCD reference to an EBA benchmark rate, i.e. that it will be used to calculate illustrations to show the consumer the potential impact of the variability of the borrowing rate. The EBA also considered that the formula to calculate the EBA benchmark rate should be simple, straightforward and easy for creditors to use.
- 20. The EBA considered two potential options for a formula:
  - Option 1: The EBA benchmark rate = the highest value of the ECB Main Refinancing rate or the national central bank refinancing rate (or equivalent national central bank rate) in the 20 year period (or a maximum period available) prior to the date of provision of the ESIS to the consumer PLUS the borrowing rate applicable during the longest period known at the time of the provision of the ESIS; or
  - Option 2: The EBA benchmark rate the highest value of the ECB Main Refinancing rate or the national central bank refinancing rate (or the equivalent



national central bank rate) in the 20-year period (or a maximum period available) prior to the date of provision of the ESIS to the consumer MINUS the lowest value of the ECB Main Refinancing rate, the national central bank refinancing rate (or the equivalent national central bank rate) PLUS the borrowing rate applicable during the longest period known at the time of the provision of the ESIS.

- 21. Having assessed the two options against the criteria of simplicity, straightforwardness and ease of use, the EBA concluded that Option 2 is the most suitable formula to calculate the EBA benchmark rate, because the degree of representativeness of Option 2 is higher due to the fact that, by also taking account of the lowest underlying rate in the past 20 years, it acknowledges that the borrowing rate will in part reflect funding costs (which the refinancing rate information is a proxy for).
- 22. The EBA also recognised that, while the formula requires that the underlying rate is sourced for a period of 20 years prior to the date on which the ESIS is provided to the consumer (or for the duration that the data has been available if less than 20 years), it may not be proportionate for creditors to update the underlying rate each day as foreseen by the formula. Therefore, the EBA considers it reasonable that creditors may recalculate the formula for the figures to be used in the ESIS once every year rather than having to revisit the formula on a daily basis.
- 23. In order to ensure that, within each Member State, creditors use the same difference between the highest and lowest values of the underlying rate, this calculation should be done on the same day. In order to ensure that the values of the underlying data collected to be used in the calculations are aligned with its start date of 1 January 1999, the EBA considers that the calculation should be done on the first working day of each year.



3. Decision of the European Banking Authority specifying the benchmark rate under Annex II to Directive 2014/17/EU (Mortgage Credit Directive)



EBA/DC/2016/145	
21 March 2016	

# Decision of the European Banking Authority specifying the benchmark rate under Annex II to Directive 2014/17/EU (Mortgage Credit Directive)

#### The Board of Supervisors of the European Banking Authority

**Having regard to** Regulation (EU) No 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC<sup>3</sup> (the 'Regulation' and 'the EBA'), in particular Article 8(1) (j) thereof,

**Having regard to** Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No 1093/2010<sup>4</sup>, in particular Part B, Section 4, paragraph (2) and Section 6, paragraph (4) of Annex II thereto,

#### Whereas:

- (1) Pursuant to Article 14(2) of Directive 2014/17/EU the personalised pre-contractual information to be provided to consumers before being bound by any credit agreement or offer has to be provided by means of the European Standardised Information Sheet ('ESIS'), as set out in Annex II thereto.
- (2) Pursuant to paragraph 2, Section 4, and paragraph 4, Section 6, of Part B of Annex II to Directive 2014/17/EU, where the borrowing rate is variable the ESIS must include an illustrative example of the annual percentage rate of charge and an illustration of a maximum instalment amount. Where there is no cap on the borrowing rate and the creditor does not use an external reference rate, the calculation of both of these illustrative examples must be based on a benchmark rate specified by a competent authority or the EBA (the 'EBA benchmark rate').

<sup>&</sup>lt;sup>3</sup>OJ L 331, 15.12.2010, p. 12.

<sup>&</sup>lt;sup>4</sup>OJ L 60, 28.12.2014, p.34.



- (3) The EBA benchmark rate should be simple, easy to use and representative. The specification of the rate by way of a formula should ensure that the rate remains representative over time and should enable due account to be taken of national circumstances. The formula should be limited to a number of publicly available data in order to ensure that it is easy to use and simple.
- (4) The time periods for the underlying rate should follow the time periods set out in Annex II to Directive 2014/17/EU for those scenarios where an external reference rate is used for calculating the borrowing rate. Therefore, the EBA benchmark rate should be based on an underlying rate for the 20 years before the ESIS is provided by the creditor to the consumer.
- (5) To be representative, the formula should rely on an underlying rate relevant to the Member State in which the ESIS is provided to the consumer. The underlying rate should be the European Central Bank's ('ECB') main refinancing rate for Member States having the Euro as their currency, and the national central bank's refinancing rate (or equivalent national central rate) for other Member States. These rates will produce a benchmark rate which is representative of the local mortgage market; and complete historical data on those rates are available for all Member States. However, since historical data on the ECB's main refinancing rate are only available from 1 January 1999, the earliest start date of the historical period should be set on 1 January 1999. This earliest start date should apply to ESISs provided in all Member States in order to ensure that the same historical time period will be used across the European Union.
- (6) The formula should acknowledge that the borrowing rate will in part reflect funding costs, which the refinancing rate information is a proxy for, by also taking into account the lowest underlying rate in the preceding 20 years.
- (7) As the formula forms part of an illustrative example, it is sufficient that creditors update the underlying rate on an annual basis.
- (8) In order to ensure that, within each Member State, creditors use the same difference between the highest and the lowest values of the underlying rate, the calculation of the EBA benchmark rate should be done using the same reference date which should be the first working day of each year.
- (9) In order to ensure that the illustrative examples reflect local circumstances, the EBA benchmark rate should not be used, where a competent authority has specified a benchmark rate, the benchmark rate specified in this decision should not apply.
- (10)EBA has conducted open public consultation on the draft decision on an EBA benchmark rate, analysed the potential related costs and benefits and requested the opinion of the Banking Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1093/2010.



#### Has decided as follows:

#### **Article 1**

The benchmark rate referred to in Part B, Section 4, paragraph (2) and Section 6, paragraph (4) of Annex II to Directive 2014/17/EU (EBA benchmark rate) specified by the EBA is set out in the Annex.

#### **Article 2**

This Decision shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

Done at London, 21 March 2016

[signed]

Andrea Enria

Chairperson For the Board of Supervisors



## **Annex**

# The EBA benchmark rate under Annex II to the Mortgage Credit Directive (2014/17/EU)

- 1. This document sets out the benchmark rate specified by the EBA referred to in Part B, Section 4, paragraph (2) and Section 6, paragraph (4) of Annex II to Directive 2014/17/EU<sup>5</sup> ("EBA benchmark rate").
- 2. The EBA benchmark rate is to be used by creditors to calculate the illustrative example of the Annual Percentage Rate of Charge (APRC) and the illustration of a maximum instalment amount respectively, under the conditions set out in those paragraphs and for inclusion in Section 4 and Section 6 of the European Standardised Information Sheet ("ESIS") as referred to in Annex II to Directive 2014/17/EU.
- 3. The EBA benchmark rate shall apply only where the competent authority of the Member State has not specified a benchmark rate.
- 4. The formula to calculate the EBA benchmark rate is:

## EBA benchmark rate = (HR-LR) + BR

For credit agreements for which the ESIS is provided in Member States that have the Euro as their currency:

**HR** = The highest value of the ECB Main Refinancing rate in the 20-year period (or the maximum period available if shorter) prior to the date that the creditor shall calculate the difference of (HR-LR) to be used in the formula as set out in paragraphs 6 and 7.

**LR** = The lowest value of the ECB Main Refinancing rate in the 20-year period (or the maximum period available if shorter) prior to the date that the creditor shall calculate the difference of (HR-LR) to be used in the formula as set out in paragraphs 6 and 7.

<sup>&</sup>lt;sup>5</sup> Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No 1093/2010 (OJ L 60, 28.02.2014, p.34).



**BR** = The borrowing rate applicable to the credit agreement during the longest period known at the time of the provision of the ESIS.

#### For credit agreements for which the ESIS is provided in other Member States:

**HR** = The highest value of the national central bank refinancing rate (or equivalent national central bank rate) in the 20-year period (or the maximum period available if shorter) prior to the date that the creditor shall calculate the difference of (HR-LR) to be used in the formula as set out in paragraphs 6 and 7.

LR = The lowest value of the national central bank refinancing rate (or equivalent national central bank rate) in the 20-year period (or the maximum period available if shorter) prior to the date that the creditor shall calculate the difference of (HR-LR) to be used in the formula as set out in paragraphs 6 and 7.

**BR** = The borrowing rate applicable to the credit agreement during the longest period known at the time of the provision of the ESIS.

- 5. The 20-year period prior to the provision of the ESIS to the consumer shall begin, at the earliest, on 1 January 1999.
- 6. The calculation of (HR-LR) shall be carried out once every calendar year, on its first working day, with the exception of the year of the entry into force of the MCD, when the calculation shall be carried out on 21 March 2016. The calculation shall be used for the ESISs provided to consumers during the same calendar year.
- 7. The variables HR and LR are based on the underlying rates that apply in the Member State in which the creditor provides the ESIS to the consumer.

# HR and LR – the relevant national central bank refinancing rates or the equivalent rates

8. For the purposes of calculating the EBA benchmark rate for an ESIS provided in a Member State, which has a currency other than the Euro, the national central bank refinancing rates or the equivalent national central bank rates are as follows:

Member State	Name of the relevant national central bank rate as at February 2016	
Bulgaria	Bulgarian National Bank Base Rate	
Czech Republic	Czech National Bank Repo Rate	



Denmark	Tomorrow/Next (T/N) Rate, as referenced on the website of the Danmarks Nationalbank
Croatia	Croatian National Bank Lombard Rate
Hungary	The Central Bank of Hungary Central Bank Base Rate
Poland	Narodowy Bank Polski Reference Rate
Romania	Banca Naţională a României Monetary Policy Rate
Sweden	Sveriges Riksbank Reference Rate
United Kingdom	Bank of England Official Bank Rate



## 4. Accompanying documents

## 4.1 Cost-benefit analysis / impact assessment

#### A. Problem identification and baseline scenario

24. Under specific circumstances, the MCD requires that creditors use an EBA benchmark rate for the purpose of calculating the illustrative example of the APRC and an illustrative instalment amount for the ESIS. As the EBA has not already specified a benchmark rate, it developed a new EBA benchmark rate that can be used by creditors specifically and only for the purposes foreseen in the MCD. The MCD does not, however, specify how the EBA should develop its benchmark rate or what that rate should be based on. The EBA therefore identified and evaluated how best to develop its benchmark rate.

#### B. Policy objectives

- 25. At a high level, in publishing its benchmark rate the EBA aims to contribute to the development of a more transparent, efficient and competitive internal market, through consistent, flexible and fair credit agreements relating to immovable property. In line with Recital 6 in the MCD, the general objective is promoting sustainable lending and borrowing and financial inclusion, and hence providing a high level of consumer protection.
- 26. To that end, the MCD specifies the information that creditors should provide to consumers. The MCD states in Recital 40 that the consumer should receive personalised information in good time prior to the conclusion of the credit agreement in order to enable the consumer to compare and reflect on the characteristics of credit products. The MCD specifies further that personalised pre-contractual information should be provided by the creditor to the consumer so that the consumer can compare the credits available on the market, assess their implications, and make an informed decision on whether to conclude a credit agreement.
- 27. In order to ensure that the purpose of the illustrations is achieved, the EBA developed the benchmark rate to be representative of the national experience of the variability of borrowing rates so that the illustrations will resonate with consumers. Further, the technical criteria for the EBA benchmark and the underlying data and/or calculation formulae are their availability, reliability, representativeness and methodological robustness.



#### C. Options considered and cost-benefit analysis

- 28. The EBA identified three potential approaches to the benchmark rate foreseen in Annex II to MCD:
  - Option 1.1: Specify a single EBA benchmark rate that would be applicable in all Member States that do not specify their own rates. This would result in one generic rate for all relevant Member States.
  - Option 1.2: Specify a rate for each Member State that does not specify its own rate. The EBA would therefore specify an individual, bespoke rate for each Member State that does not specify its own national rate.
  - Option 1.3: Specify the methodology from which creditors can calculate the rate themselves. The EBA would therefore not specify a rate but would instead specify the rate calculation methodology, i.e. a formula. The formula would require variable as opposed to fixed input, so creditors would have to input data themselves into the formula to create the benchmark rate. In addition, the methodology would rely on one specified underlying rate for each Member State, so in effect a bespoke rate would be produced for each Member State.
- 29. The EBA evaluated each option against the following assessment criteria:
  - availability and reliability of the data to calculate the rate;
  - representativeness for consumers of the illustrative example of the APRC that is produced by creditors using the EBA rate;
  - methodological robustness of the calculated rate;
  - compliance costs for creditors and competent authorities that will accrue as a result of having to use the rate specified by the EBA or calculating the rate themselves; and
  - costs for the EBA to develop and update the rate.
- 30. The EBA concluded that Option 1.3, to publish the formula to calculate the EBA benchmark rate, was the most suitable approach based on the following assessment of each of the three options:
  - Availability and reliability of the data to calculate the rate: For all three options
    the EBA can choose an underlying rate in each Member State that is reliable and
    for which historical data is readily available.



- Representativeness for consumers of the illustrations produced using the EBA benchmark rate: Option 1.1 would produce a single generic rate that would not be representative for all Member States. The representativeness of Options 1.2 and 1.3 is higher than the 'one rate for all' option (Option 1.1) because they are based on a locally used underlying rate, but the methods do not take account of the funding and other costs that creditors include in the borrowing rates charged to consumers.
- Methodological robustness of the calculated rate: By publishing the formula to
  calculate the rate, the EBA can ensure that the benchmark rate is always up to
  date as it should be calculated by creditors at the time when they need to use it.
  This would not be the case for Options 1.1 and 1.2, as the EBA benchmark rate
  would not be updated on a daily basis.
- Compliance costs for creditors and competent authorities that will accrue as a
  result of calculating the rate themselves: It is unlikely for any of the three options
  that creditors will incur additional costs over and above the costs that they will
  incur for calculating the illustrations.
- Costs for the EBA of developing and updating the rate: The costs for the EBA as a
  result of Option 1.3 will be less than those of the other two options because, with
  Options 1.1 and 1.2, the EBA would need to regularly update the benchmark rate,
  whereas with Option 1.3 the formula will produce an up-to-date rate each time it
  is used. The formula will include 'built-in' future-proofing.
- 31. Once the EBA decided that it would develop a formula from which creditors could calculate the EBA benchmark rate, it then considered what underlying rate should be input into the formula and the historical period for that underlying rate.
- 32. Regarding the historical period for the underlying rate, the EBA considered that a 20-year historical period is appropriate because this period mimics the time period set out in Annex II to MCD, where a creditor is using an external reference rate. In effect, this would mean that the EBA benchmark rate would be based on the underlying rate for the 20-year period before the ESIS is provided by the creditor to the consumer, or the longest period for which data is available. The EBA will set the earliest start date of the 20-year period from the earliest date on which the underlying rate in all Member States is available. This will ensure that the EBA benchmark rate is calculated consistently across the EU, since the same historical time period will be used in all Member States.
- 33. The EBA considered two rates on account of their suitability for use as the underlying rate to be used to calculate the benchmark rate:
  - Option 2.1: Central Bank interest rate for Eurozone Member States, this would be the ECB Main Refinancing rate; for non-Eurozone Member States this would



be the national central bank refinancing rate, or the equivalent national central bank rate.

- Option 2.2: Average variable mortgage rates the ECB collects information from Member States (Eurozone and non-Eurozone) about average mortgage rates and collates and publishes this data on the website of the ECB's Statistical Data Warehouse. The ECB's Statistical Data Warehouse contains a number of rate categories under the heading of A22 Lending for House Purchase. According to the Manual on MFI interest rate statistics, Regulation ECB/2001/18, December 2003, are included in the rate category 'up to one year initial rate fixation'. This information is available for 31 countries.
- 34. The EBA assessed each of the two rate options against the following evaluation criteria:
  - the rate (including historical data) should be easily available to creditors, for example, via a public website;
  - the rate should be reliable; and
  - the rate should be representative of mortgage markets in each Member State.
- 35. The EBA concluded that Option 2.1, to use Central Bank interest rates (for main refinancing operations), was the most suitable underlying rate to use. The EBA's analysis and conclusion are set out in Table 1, and are supported in Table 2.
- 36. In addition, as the historical data on the ECB main re-financing rate is available from 1 January 1999, the earliest date from which the 20-year historical period will commence will be set at 1 January 1999 for the calculation of the EBA benchmark rate in all Member States.

<sup>&</sup>lt;sup>6</sup> Paragraph 4 of Section 7.7.4,



	Table 1. Assessment of the underlying rate options							
Evaluation criteria	Option 2.1	Option 2.2	Overall assessment					
A – Historical data availability	Historical data is publicly available on the ECB refinancing rate for the period from 1 January 1999 to date. Historical data on the national central banks' base rates is also easily available for non-Eurozone Member States.	The ECB Data Statistical Warehouse Monetary Financial Institution interest rate statistics (MFI interest rate statistics) contain historical data on the average variable mortgage interest rates for Member States. The earliest date from which data is available is January 2003 (for 13 Member States). In addition, there are gaps in the time series for the data available for nine Member States, and in one Member State there is a gap of approximately five years. Also, there is no data available for one Member State under the category 'up to one year initial rate fixation', where variable rates are situated.	In terms of the availability of historical data, this data is available consistently for the rates outlined in Option 2.1 but for Option 2.2 there are gaps in the time series for available data for 11 Member States. The gaps in the time series for 11 Member States in Option 2.2 may impact the representativeness of the illustrations that would be produced using the rates in Option 2.2. Therefore based on this evaluation criterion Option 2.1 is more suitable.					
B – Reliability	The ECB refinancing rate and the national central banks' base rates are commonly perceived to be reliable and of good repute.	The data is collected by national central banks and collated by the ECB Data Statistical Warehouse. This data is therefore commonly perceived to be reliable and of good repute.	Both rate options can be considered to be reliable and of good repute.					
C – Market representativeness	To determine if the ECB refinancing rate or the national central banks' refinancing rates for non-Eurozone Member States can be considered representative of the mortgage markets, the EBA completed a comparison of the highest ECB refinancing rate or the national central banks' refinancing rates for non-Eurozone MS against the variability (highest rate minus lowest rate) of the average variable mortgage rates in each MS. This is set out in Table 2 below.	The data is based on interest rates that are individually agreed between the borrower and the lending bank, and are then collected by national central banks and collated by the ECB. The data in this option is, therefore, representative of the mortgage markets in each Member State because this data represents the average mortgage rate on the outstanding amounts for each Member State.	Option 2.2 appears to be more representative of individual mortgage markets than Option 2.1. Nevertheless, Option 2.1 would also be representative, since in 24 Member States the highest ECB refinancing rate or the equivalent national central bank rate for the 20-year period to 21 March 2016 (or the period since 1999 for the ECB rate), is higher than the difference between the lowest and highest average mortgage rates in the Member State in the historical periods for which this data is available. For example, if the highest ECB or central bank rate was added to the lowest average mortgage rate, it would illustrate to the consumer the potential variability of the interest rate based on past experience of interest rates.					

http://www.ecb.europa.eu/stats/pdf/mir\_general\_description.pdf?245542ed13f5a99aa996609a06ce0814

8 2003 is the earliest date from which the average mortgage rates are available from the ECB Data Statistical Warehouse.



	Eurozone Memb	er States – overview	of mortgage interes	st rates					
Member State	OPTION 2.1 Highest ECB/national	Period of available	OPTION: Lowest rate & highest rate in	Range of interest rate levels in the period	Member State	OPTION 2.1 Highest ECB/national	Period of available	OPTION 2.2  Lowest rate & highest rate in the	Range of interest rate
	central bank rate since 1 January 1999	historical data	the period	(highest rate – lowest rate)	l	central bank rate since 1 January 1999	historical data	period	(highest rate – lowest
Austria	4.75%	1/2003 – to date	2.12 - 6.32%	4.20%	Netherlands	4.75%	1/2003 – to date	2.80 - 6.03%	3.23%
Belgium	4.75%	10/2006 - to date	2.84 - 5.87%	3.3%	Portugal*	4.75%	1/2003 – 7/2006, 5/2011 – 5/2015	3.01 – 5.99%	2.98%
Cyprus	4.75%	1/2008 – to date	4.06 – 7.44%	3.38%	Slovakia (Euro)*	4.75%	1/2004 – to date	3.60 - 6.22%	2.62%
Estonia (Euro)	4.75%	1/2005 – to date	2.17 – 6.91%	4.74%	Slovakia (Slovak koruna)		1/2004 – 12/2008	5.07 – 6.96%	1.83%
Estonia (Estonian kroon)*		1/2003 – 12/2010	4.08 – 8.89%	4.81%	Slovenia (Euro)*	4.75%	5/2005 – to date	2.68 – 7.40%	4.72%
Finland	4.75%	1/2003 – to date	1.55 – 5.54%	3.99%	Slovenia (Slovenian tolar)*		5/2005 – 12/2006	4.69 – 7.09%	2.40%
rance	4.75%	1/2003 – to date	2.48 – 5.27%	2.79%	Spain	4.75%	1/2003 – to date	3.24 - 6.00%	2.76%
Germany	4.75%	1/2003 – to date	2.87 - 6.31%	3.44%		Non-Furozo	ne MS – overview o	of mortgage interest r	ates
Greece*	4.75%	1/2003 – to date	3.26 – 7.98%	4.72%	Bulgaria (Bulgarian lev)	5.77%	1/2007 – to date	4.36 – 13.63%	9.27%
Ireland	4.75%	1/2003 – to date	2.75 – 6.53%	3.78%	Czech Republic (Czech koruna)*	9.50%	1/2004 – to date	4.03 – 8.68%	4.65%
Italy	4.75%	1/2003 – to date	3.56 - 6.45%	2.89%	Denmark (Danish krone)	6.9687%	1/2003 – to date	3.83 – 7.88%	4.05%
Latvia (Euro)	4.75%	1/2004 – to date	2.33 – 30.24%	27.91%	Croatia (Croatian kuna)*	13.00%	12/2011 – to date	4.00 – 12.86%	8.86%
Latvia (Latvian lats)		1/2004 – 12/2013	1.84 - 52.23%	50.39%	Hungary (Hungarian forint)	16.00%	1/2003 – to date	2.92 - 15.57%	12.65%
ithuania (Euro)	4.75%	3/2005 – to date	0.58 - 6.70%	6.12%	Poland (Polish zloty)	19.00%	1/2005 – 9/2014	5.38 – 9.47%	4.09%
ithuania (Lithuanian itas)		3/2005 - 12/2014	0.57 - 11.99%	11.42%	Romania (Romanian Ieu)*	34.60%	1/2007 – to date	7.50 – 16.70%	9.20%
Luxembourg	4.75%				Sweden (Swedish krona)	4.50%	8/2005 – to date	1.55 – 6.01%	4.46%
Malta (Euro)*	4.75%	3/2007 – to date	2.60-6.86%	4.26%	United Kingdom (pound sterling)	6.25%	1/2004 – to date	3.93 - 6.46%	2.53%
Malta (Maltese lira)*		3/2007 – 12/2007	5.41 – 6.49%	1.08%					

<sup>\*</sup>There are gaps in the time series of available data.



#### 37. The EBA considered two potential formulae:

- a) **Option 3.1:** The EBA benchmark rate the highest value of the ECB Main Refinancing rate or the national central bank refinancing rate (or the equivalent national central bank rate) in the 20-year period (or the maximum period available) prior to the date of issue of the ESIS to the consumer PLUS the borrowing rate applicable during the longest period known at the time of the provision of the ESIS.
- b) Option 3.2: The EBA benchmark rate the highest value of the ECB Main Refinancing rate or the national central bank refinancing rate (or the equivalent national central bank rate) in the 20-year period (or the maximum period available) prior to the date of issue of the ESIS to the consumer MINUS the lowest value of the ECB Main Refinancing rate and the national central bank refinancing rate (or the equivalent national central bank rate) PLUS the borrowing rate applicable during the longest period known at the time of the provision of the ESIS.
- 38. Both formulae require the creditor to add the borrowing rate that will apply to the consumer's agreement and thus the EBA benchmark rate produced will include the funding costs and other applicable criteria to determine the borrowing rate in the first place. This ensures that the EBA benchmark rate will represent each consumer's borrowing rate.
- 39. Both formulae take account of the highest underlying rate in the last 20 years (or the maximum period available) and as a result the benchmark rate produced will illustrate the highest mortgage rates in Member States in the last 20 years. The representativeness of the EBA benchmark rate produced by the formula under Option 3.2 is increased because the second formula also takes account of the lowest underlying rate in the past 20 years. As a result, the second formula may be more precise than the first formula because it considers that an element of the underlying rate may also be included in the borrowing rate and therefore eliminates the possibility of including that twice in the formula.
- 40. Based on this assessment the EBA concluded that Option 3.2 is the most suitable formula to use to calculate the EBA benchmark rate.
- 41. In addition, to ensure that all the illustrations in a Member State that are calculated using the EBA benchmark rate will consistently reflect the rate experience in that Member State, the EBA requires that the underlying rates input into the formula are those applicable to the market of the Member State in which the creditor is providing the ESIS to the consumer.



### 4.2 Views of the Banking Stakeholder Group (BSG)

- 42. The BSG agreed that the EBA should specify a formula for the benchmark rate, rather than a single EBA benchmark rate. Regarding the historical period for the underlying rate, the BSG supports the EBA's approach the EBA benchmark rate would be based on the underlying rate for the 20-year period before the ESIS is provided to the consumer or the longest period for which data is available. However, in the longer run the MCD will need to be reviewed as the 20-year period will begin to include a time period when interest rates were at record lows. At this point it may be appropriate to introduce a more forward-looking measure of potential interest rates increases.
- 43. The BSG was, however, of the opinion that the proposed formula for calculating the benchmark rate was not the option that would best reflect the consumer's interests and therefore proposed an alternative approach instead. Furthermore, the BSG suggested that the most suitable underlying rate is not a central bank interest rate, but Libor, Euribor or other interbank rates in the relevant Member States, and argued that such rates would better reflect the funding costs of residential mortgages than the base rates.

# 4.3 Feedback on the public consultation and on the opinion of the BSG

- 44. The EBA publicly consulted on the formula contained in this paper. The consultation period lasted for 6 weeks and ended on 20 November 2015. Four responses were received, of which three were published on the EBA website.
- 45. This chapter presents a summary of the key points made in the responses the EBA has received, the EBA's assessment of these responses, and the conclusions at which the EBA has arrived as to which, if any, amendments should be made to the proposals on which the EBA had consulted.

#### Summary of the key points made and the EBA's response

- 46. The EBA posed three questions in the Consultation Paper:
  - Question 1: Do you agree with the EBA's approach to deliver the EBA benchmark rate by publishing a formula from which creditors can calculate the rate? If not, outline why you disagree and suggest an alternative approach, including the reasons for the suggestion.
  - Question 2: Do you agree with the proposed EBA formula? If not, outline why you disagree and specify how the formula could be improved.



- Question 3: Do you agree with the underlying rate to be input into the proposed EBA formula? If not, outline why you disagree and suggest an alternative rate, including the reasons for the suggestion.
- 47. Respondents agreed with the EBA's proposal to specify the methodology from which creditors can calculate the rate, instead of providing a single rate.
- 48. However, one respondent questioned the formula proposed by the EBA, stating that it was unclear why the formula deducted the lowest value of the underlying rate from the highest value of the underlying rate. The respondent requested clarification on how the formula would work in the case of negative values for the underlying rates. The same respondent suggested alternative ways in which the formula should be devised. The EBA would like to clarify and reiterate that the formula deducts the lowest value of the underlying rate from the highest value of the underlying rate because, without such a deduction, the formula would double count the funding costs. This follows because the borrowing rate will, in part, reflect the funding costs for which the underlying rate information is a proxy. In the case of the lowest value of the underlying rate being negative, the formula will capture that effect by increasing the variability margin, which in turn reflects the decrease in funding costs.
- 49. Another respondent questioned the EBA's choice for the underlying rates to be used in the formula, and proposed using Euribor, Libor or a similar rate instead. The same respondent added that the alternative rates were more representative of funding costs, especially during a crisis.
- 50. While developing the formula, the EBA thoroughly assessed the choice of the underlying rates, using criteria that included the accessibility of the rates to creditors and the reliability of the rates in terms of the extent to which they correlate with mortgage rates, as well as their degree of representativeness of the mortgage markets in the respective Member States. To address the suggestion made by the respondent, the EBA also assessed the alternatives proposed against the availability criteria, and concluded that they are not superior, because equivalent rates are not available in all Member States and there are no similar rates available for the remaining markets. In addition, to assess the respondent's reference to the past experience, the EBA analysed the development of the ECB Main Refinancing rate, the 12-month Euribor, and the ECB MFIs' rates in the period between 2000 and 2015. While there is a significant correlation between the Euribor and the MFI rate, the ECB rate and the MFI rate also correlate, in particular since 2008. This is shown in Figure 1 in Annex 1 to Table A with the summary of responses and EBA's assessment.
- 51. Another respondent commented that the historical 20-year time period of the underlying rates' values would be inadequate, specifically for non-Eurozone Member States. The EBA clarifies that the definition of the 20-year past time period comes from Annex II to MCD, which provides that 'Where there is no cap the example shall illustrate the APRC at the highest borrowing rate in at least the last 20 years, or where the underlying data for the calculation of the borrowing rate is available for a period of less than 20 years the longest



period for which such data is available based on the highest value of any external reference rate used in calculating the borrowing rate where applicable or the highest value of a benchmark rate specified by a competent authority or EBA where the creditor does not use an external reference rate'.

52.In conclusion, the EBA considers that the proposed formula and the choice for underlying rates make it possible to achieve the aim of the calculations of the illustrative examples to be provided in the ESIS, which is to show the potential impact of rate variability for mortgage contracts under a variable rate and within the circumstances where the EBA rate could be applicable.



Table A: Summary of responses to the Consultation Paper and the EBA's assessment

Comments	Summary of responses received	EBA assessment	Amendments to the proposals
General responses			
Purpose of the ESIS	One respondent, while agreeing with the EBA proposal set out in the Consultation paper, stated its view that the ESIS should remain a non-contractual document and that the illustrations calculated using the EBA's benchmark rate (illustrative example of the APRC and the illustration of a maximum instalment amount) should be informative only.	The respondent's comments do not relate to the proposal set out in the EBA's Consultation Paper. Instead the comments relate to the status of the ESIS and the illustrations contained in the ESIS, both of which are set out in MCD and are outside of the remit of the EBA.	None
The EBA's role in setting rates	One respondent, while agreeing with the EBA proposal set out in the Consultation Paper, commented that, as the EBA is not a rate-setting authority, it should therefore avoid any possible future overlaps with the ECB's competence as a rate-setting authority.	The EBA acknowledges that it is not a rate-setting authority, as mentioned in the Rationale. In specifying this benchmark rate, the EBA is fulfilling the mandate set out in Annex II to MCD. The sole purpose of the EBA benchmark rate is for the calculation of the illustrative example of the APRC and the illustration of a maximum instalment amount as required under Annex II to MCD. There is, therefore, no overlap with the ECB's competence.	None



All of the respondents to the consultation agreed with the EBA's approach to deliver the EBA benchmark rate by publishing a formula from which creditors can calculate the rate, rather than setting one single rate.

The EBA notes that all of the consultation respondents agreed with the proposed approach of setting a formula from None which creditors can calculate the FBA benchmark rate.

the proposed EBA formula? If not, outline why you disagree and specify how the formula could be improved.

Two respondents agreed with the formula proposed by the EBA.

The EBA notes that the respondents agreed with the proposed formula from which creditors can calculate the EBA None benchmark rate.

One respondent disagreed with the formula proposed by the EBA stating that it was unclear why the formula deducted the lowest value of the underlying rate from the highest value of the underlying rate.

By deducting the lowest value of the underlying rate from the highest value of the underlying rate, the formula acknowledges that the borrowing rate will in part reflect None funding costs for which the underlying rate information is a proxy. As the funding costs are already included in the borrowing rate, the EBA had decided for its proposal to deduct the lowest underlying rate so that the funding costs were not counted twice.

The respondent also questioned how a negative rate, where it was the lowest underlying rate, would be treated in the formula.

In response to the respondent's question about the treatment of negative underlying rates, the EBA acknowledges that the calculation of the EBA benchmark rate would result in a double negative if a negative rate were None input as the lowest underlying rate, e.g. 5% - (-2%) = 7%.

The EBA considers that the proposed solution to ensure double counting of funding costs is avoided (including a



deduction of the lowest value of the underlying rate) should be consistent in both scenarios, or with positive and negative values of the underlying rate. Both increases and decreases in the value of the underlying rate would have a direct impact on funding costs; therefore, both movements in the underlying rate should be reflected in the calculation, regardless of whether the underlying rate is positive or negative.

The aim of the calculations of the illustrative examples to be provided in the ESIS is to show the potential impact of rate variability. The difference between the highest and the lowest value of the underlying rate, in the 20-year window, as proposed by the EBA, captures the variability range. This achieves the aim of the illustrative examples.

The EBA responds as follows to the respondent's proposed alternative formula:

a) In the early stages of developing the EBA benchmark rate the EBA had considered a formula where the current underlying rate is deducted from the highest underlying rate. However, following initial analysis it became clear that such a formula could possibly result in an EBA benchmark rate that was the same as the actual borrowing rate applicable to the credit agreement. This situation could arise if the current underlying rate was also the highest underlying rate. As this was deemed undesirable, the EBA did not consider this option further.

Annex II to MCD provides that, where the creditor uses an external reference rate when calculating the borrowing rate, the creditor shall use the highest value of that external reference rate to calculate the illustrative example of the

The respondent proposed the following alternative formula:

The highest underlying rate PLUS the borrowing rate applicable to the mortgage during the longest period known at the time of the provision of the ESIS, MINUS the value of the underlying rate considered in the borrowing rate or the actual level of the underlying rate where it is not used to calculate the borrowing rate.



APRC and the illustration of a maximum instalment amount. Therefore, the EBA benchmark rate will not apply where an external reference rate is used to calculate the borrowing rate. As a result it will not be possible for the EBA formula to deduct the value of the underlying rate considered in the borrowing rate.

Question 3: Do you agree with the underlying rate to be input the into proposed EBA formula? If not, outline why you disagree and suggest alternative rate, including the reasons for the suggestion.

into the proposed EBA formula.

Two respondents agreed with the underlying rate to be input. The EBA notes the agreement of the respondents to the underlying rate to be input into the proposed EBA formula.

None

One respondent disagreed with the EBA's proposal for non-Eurozone Member States to use the time period of 20 years for the historical underlying rate, as it considers it irrelevant to take into consideration national central bank refinancing rates, which refer to periods when the respective countries were just starting to implement economic reforms, were experiencing high inflation, and were not EU members. The respondent considered that the spreads resulting from such calculations are not realistic, and are not related to the current economic situation in the respective countries or their economic forecasts.

The respondent proposed improving the formula by relying more on the future than the past, i.e. by relying more on forecasts than historical values, and reducing the period taken into consideration, to exclude the extreme/'accidental' values caused by certain specific factors, etc.

The EBA does not agree with the respondent's proposal as the definition of the 20-year past time period comes from Annex II to MCD, which provides that 'Where there is no cap the example shall illustrate the APRC at the highest borrowing rate in at least the last 20 years, or where the underlying data for the calculation of the borrowing rate is available for a period of less than 20 years the longest period for which such data is available based on the highest value of any external reference rate used in calculating the borrowing rate where applicable or the highest value of a benchmark rate specified by a competent authority or EBA where the creditor does not use an external reference rate.'



One respondent disagreed with the EBA's choice for the underlying rates. This respondent argued that the underlying rate should be Libor, Euribor or the other interbank rates in the relevant Member States, mentioning that these are more relevant to the funding costs of residential mortgages than the base rates.

The EBA acknowledges the potential value of interbank offered rates, as these are benchmark rates set by market participants according to private agreements and codes of conduct. However, while Euribor is representative for transactions in Euros, and Libor is representative for transactions in the London interbank market and is currently set in five currencies (USD, GBP, JPY, EUR, and CHF), there are no similarly established benchmarks in the other currencies of EU Member States outside the Eurozone. As a result, using such interbank rates as underlying rates for the EBA's formula would only be applicable to the Eurozone countries and the UK. For the remaining Member States, the EBA would need to use another rate, possibly the national central bank refinancing rate or an equivalent national central bank rate. This would result in an uneven selection for the underlying rates as different types of rates would be applicable according to the MS's region and currency.

None

The respondent added that experience from the past, especially in times of crisis, has shown that banks can raise mortgage rates due to increases in their funding costs, even if the ECB base rate or the central bank base rate remains at the same level or even decreases.

To assess the respondent's reference to past experience, the EBA analysed the development of the ECB Main Refinancing rate, the 12-month Euribor, and the MFIs' rates in the period between 2000 and 2015. While there is a significant correlation between the Euribor and the MFI rate, the ECB rate and the MFI rate also correlate, in particular since 2008. This analysis is shown in Figure 1 in the Annex to this table.

None



## Annex to the Summary of responses to the consultation and the EBA's analysis

Figure 1. Evolution of interest rates, 2008-2015

