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EBA FINAL draft Regulatory Technical Standards

on prudent valuation under Article 105(14) of Regulation (EU) No 575/2013 (Capital Requirements Regulation — CRR)

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1. Executive Summary

Regulation (EU) No 575/2013 (Capital Requirements Regulation — CRR) sets out requirements relating to prudent valuation adjustments of fair-valued positions to determine prudent values that achieve an appropriate degree of certainty having regard to the dynamic nature of trading book positions. This Regulation mandates the EBA to prepare draft regulatory technical standards (RTS) in this area.

In July 2013, the EBA consulted on the draft Regulatory Technical Standards (RTS) and conducted a Quantitative Impact Study (QIS) to assess the overall impact of the proposed RTS. The results of the QIS and the feedback received have been taken into account by the EBA when formulating the final draft RTS contained herein. The QIS has also been used to enhance the impact assessment that was prepared for the consultation.

The draft final RTS put forward two approaches for the implementation of the prudent valuation requirements in the CRR.

Simplified approach

In order to apply the rules in a proportionate manner and to reduce the operational burden on institutions with limited exposure to fair-valued positions, the final draft RTS specify a proportionality threshold below which a ‘simplified approach’ can be used to calculate additional valuation adjustments (AVAs). Under the simplified approach, the calculation of the required AVA is based on a percentage of the aggregate absolute value of fair-valued positions held by the institution which amounts to 0.1%. This adjustment covers all AVAs.

Institutions may apply the simplified approach provided the sum of the absolute value of fair-valued assets and liabilities is less than EUR 15 billion. When testing this threshold, assets and liabilities are only included to the extent that changes in their value impact CET1 capital. However, in order to mitigate the risk that, within a group, positions with high valuation risk are placed in smaller subsidiaries with a balance sheet that is below the threshold, and to ensure more consistency in the valuation of positions within a group, the core approach is compulsory for all entities of the group included in the consolidation once the threshold is breached on a consolidated basis.

Core approach

The ‘core approach’ provides a framework that can be consistently applied for prudent valuation. The core approach is compulsory for institutions that are above the threshold of the simplified approach, but may also be implemented by institutions that are below this threshold. Central to the aim of a consistent implementation of the prudent valuation requirements is a clear indication of the level of prudence that institutions should target when estimating AVAs.

The core approach of the RTS has the following key features:

- Each AVA shall be calculated as the excess of valuation adjustments required to achieve the identified prudent value over any adjustments applied in the institution's fair value adjustment that can be identified as addressing the same source of valuation uncertainty as the AVA;
- Where possible, the prudent value of a position is linked to a range of plausible values and a specified target level of certainty (90%)¹. In practical terms, this means that for the following AVAs: i) Market price uncertainty; ii) Close-out costs; and iii) Unearned credit spreads institutions are required to calculate the prudent value using market data and the specified target level of certainty;
- In all other cases, an expert-based approach is specified, together with the key factors that are required to be included in that approach. In these cases the same target level of certainty as above (90%) is set for the calibration of the AVAs.

The calculations within the core approach are designed to cause limited burden on institutions by using data from the IPV (independent price verification) process as the foundation of the approach, given that the IPV should be readily available within institutions.

Aggregation of AVAs

Under the simplified approach, no aggregation is required, as the total AVA is obtained directly at the institution level.

Under the core approach, the aggregation of individual AVAs related to market price uncertainty, model risk and close-out costs is determined separately for each category as either an aggregate AVA that is 50% of the sum of individual AVAs or, alternatively, as the sum of individual AVAs minus 50% of the aggregated difference between the expected value and the prudent value of valuation exposures.

For all other categories of AVAs under the core approach, the aggregate category level AVA is calculated as a simple sum of individual AVAs. The total aggregate AVA under the core approach is the simple sum of the category level AVAs.

Future review of the RTS

The approach for calculating AVAs has a direct connection to the valuation approach applied under accounting requirements. As such, if future accounting requirements alter the approach for determining a fair value, the EBA will consider whether amendments are required to these RTS.

¹ The EBA accepts that for the majority of positions where there is valuation uncertainty, it is not possible to statistically achieve a specified level of certainty; however, specifying a target level is believed to be the most appropriate way to achieve greater consistency in the interpretation of a 'prudent' value.

2. Background and rationale

Regulation (EU) No 575/2013 (Capital Requirements Regulation — CRR) requires the EBA to develop draft RTS to specify the conditions according to which the requirements of Article 105 shall be applied.

Article 105 describes a number of categories of valuation adjustments that should be considered in the context of prudent valuation. The adjustments should be applied to fair-valued positions to determine a prudent value that achieves an ‘... appropriate degree of certainty having regard to the dynamic nature of trading book positions, the demands of prudential soundness and the mode of operation and purpose of capital requirements in respect of trading book positions’.

Article 34 requires institutions to deduct from Common Equity Tier 1 capital the aggregate AVA made for fair value assets and liabilities following the application of Article 105.

In November 2012, the EBA published a Discussion Paper (DP) expressing its preliminary views on this topic. The DP was designed to elicit discussion and gather stakeholders’ opinions at an early stage of the development of the technical standards. The responses received were taken into account when developing a Consultation Paper (CP) published by the EBA in July 2013. The CP had an associated QIS to determine the impact of the draft RTS.

The EBA has developed the final draft RTS taking into account both the feedback on the CP and the QIS results.

Scope of the prudent valuation standards

Article 105 of Regulation (EU) No 575/2013 refers to the prudent valuation standards being applicable to all trading book positions. However, Article 34 of the same Regulation requires that institutions apply the standards of Article 105 to all assets measured at fair value.

The combination of the above articles implies that the prudent valuation requirements in these RTS apply to all fair-valued positions regardless of whether they are held in the trading book or banking book.

For assets and liabilities for which a change in accounting valuation would have a partial or zero impact on own funds, AVAs are only calculated in proportion to the impact a change in valuation would have on own funds (this would be the case, for example, for AFS positions for which the prudential filter still partially applies).

Overview of approaches for determining category level AVAs

The approaches specified in the RTS are intended to provide a framework that can be applied consistently for prudent valuation. Central to that aim is a clear indication of the level of certainty that institutions should target when estimating AVAs.

The RTS describe a core approach with the following key features:

- Each AVA shall be calculated as the excess of valuation adjustments required to achieve the identified prudent value over any adjustments applied in the institution's fair value adjustment that can be identified as addressing the same source of valuation uncertainty as the AVA;
- Where possible, the prudent value of a position is linked to a range of plausible values and a specified target level of certainty (90%)²; and
- In all other cases, an expert-based approach is specified, together with the key factors that should be included in that approach. In these cases, the same target level of certainty as above (90%) is set for the calibration of the AVAs.

Section 4.1 provides a worked example of how the core approach described in the RTS could be implemented in practice for market price uncertainty and close-out costs. **The worked example could not be updated following the revision of these RTS and still considers a volatility test based on a volatility measure instead of the variance measure introduced by the present revision. However, the example has been kept for information purposes.**

Under the core approach, diversification benefits may be applied to certain AVAs based on either: the difference between the fair value and prudent value (in which case the AVA is the calculated difference); or the difference between the mean of the estimated plausible range of values and the prudent value (in which case the AVA is the excess of this difference over any related valuation adjustments already applied in fair value).

Calculations within the core approach should be based on data from the IPV process, which should be readily available within institutions. Nevertheless, in order to take account of proportionality and limit any excessive burden on institutions with low exposure to fair-valued positions, the EBA introduces a proportionality threshold below which a simplified approach can be used to calculate AVAs.

The simplified approach calculates the required AVA based on a percentage of the aggregate absolute value of fair-valued positions held by the institution. All fair-valued positions will be taken into account when determining the AVA. No distinction is made for liquid positions.

² The EBA accepts that for the majority of positions where there is valuation uncertainty, it is not possible to statistically achieve a specified level of certainty, however specifying a target level is believed to be the most appropriate way to achieve greater consistency in the interpretation of a 'prudent' value.

In both approaches, for assets and liabilities for which a change in accounting valuation would have a partial or zero impact on own funds, only the amount of positions that has an impact on own funds shall be included in the calculation of the threshold or the resulting AVAs.

Aggregation of AVAs

Under the simplified approach, no aggregation is required, as the total AVA is obtained directly at the institution level.

Under the core approach, for individual AVAs addressing genuine uncertainty related to market price uncertainty, model risk and close-out costs, their aggregation is determined separately for each category as an aggregate AVA that is 50% of the sum of individual AVAs.

For all other AVAs under the core approach, the aggregate AVA is calculated as a simple sum of individual AVAs.

Finally, the total aggregate AVA under the core approach is the simple sum of the category level AVAs.

Systems, controls and documentation

Article 105 of Regulation (EU) No 575/2013 describes, at a high level, the minimum documentation, systems and controls that should support the prudent valuation process. The RTS provide further detail on these minimum standards and establish on how they can be implemented in a way that supports the approaches described.

3. EBA FINAL draft Regulatory Technical Standards on prudent valuation under Article 105(14) of Regulation (EU) No 575/2013 (Capital Requirements Regulation — CRR)



Brussels, **XXX**
[...](2013) **XXX**

COMMISSION DELEGATED REGULATION (EU) No .../..

of **XXX**

COMMISSION DELEGATED REGULATION (EU) No .../...
supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards for prudent valuation under Article 105 (14)

COMMISSION DELEGATED REGULATION (EU) No .../..

of XXX

[...]

**COMMISSION DELEGATED REGULATION (EU) No .../...
supplementing Regulation (EU) No 575/2013 of the European Parliament
and of the Council with regard to regulatory technical standards for
prudent valuation under Article 105 (14)**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012³, and in particular third subparagraph of Article 105(14) thereof,

Whereas:

- (1) Article 105 of Regulation (EU) No 575/2013 refers to the prudent valuation standards being applicable to all trading book positions. However, Article 34 of the same Regulation requires that institutions shall apply the standards of Article 105 to all assets measured at fair value. The combination of the above articles implies that the prudent valuation requirements apply to all fair-valued positions regardless of whether they are held in the trading book or banking book, where the term 'positions' refers solely to financial instruments and commodities.
- (2) Where the application of prudent valuation would lead to a lower absolute carrying value for assets or a higher absolute carrying value for liabilities than recognised in accounting, an additional valuation adjustment (AVA) should be calculated as the absolute value of the difference between the two, as the prudent value should always be equal to or lower than the fair value for assets and equal to or higher than the fair value for liabilities.
- (3) For valuation positions for which a change in accounting valuation has only a partial or zero impact on Common Equity Tier 1 capital, AVAs should only be

³ OJ 176, 27.6.2013, p. 1.

applied based on the proportion of the accounting valuation change that impacts Common Equity Tier 1 capital. These include: positions subject to hedge accounting; Available-For-Sale positions to the extent their valuation changes are subject to a prudential filter; and exactly matching, offsetting positions.

- (4) AVAs are determined only for the purpose of calculating adjustments to Common Equity Tier 1 capital, where necessary. AVAs do not affect the determination of the own funds requirements according to Article 92 paragraph 3(b)(i) of Regulation (EU) No 575/2013 (unless the derogation for small trading book business according to Article 94 of that Regulation applies), and 3(c)(i) and (iii) of that Regulation.
- (5) In order to provide a consistent framework by which AVAs are calculated by institutions, a clear definition of the target level of certainty and the elements of valuation uncertainty that should be considered when determining a prudent value is necessary together with defined methodologies for achieving the required level of certainty based on current market conditions.
- (6) Market price uncertainty, close-out costs and model risk AVAs should be calculated on the basis of Valuation Exposures, which are based on financial instruments or portfolios of financial instruments. For these purposes, financial instruments may be combined to portfolios when, for market price uncertainty and close-out costs AVAs, the instruments are valued on the basis of the same risk factor or when, for model risk AVAs, they are valued on the basis of the same pricing model.
- (7) Given that certain AVAs that relate to valuation uncertainty are not additive, an aggregation approach that can take account of diversification benefits should be made possible to be used within certain categories of AVAs for the elements of the AVA that do not relate to an element of expected exit cost that is not included in fair value. For the purpose of aggregating AVAs it should also be made possible to receive diversification benefits on the difference between the expected value and the prudent value so that banks with a fair value which is already more prudent than expected value do not get less diversification benefit than those that use the expected value as the fair value.
- (8) Since institutions with small fair value portfolios will typically be subject to limited valuation uncertainty, they should be permitted to apply a simpler approach to estimate AVAs than those institutions with larger fair value portfolios. The size of fair value portfolios, for the purpose of determining whether a simpler approach can be applied, should be assessed at each level at which capital requirements are calculated.
- (9) In order for competent authorities to be able to assess that institutions have correctly applied the requirements for assessing the aggregate level of AVAs required, appropriate documentation, systems and controls should be maintained by institutions.
- (10) This Regulation is based on the draft regulatory technical standards submitted by the European Supervisory Authority (European Banking Authority) to the Commission.
- (11) The European Supervisory Authority (European Banking Authority) has conducted open public consultations on the draft regulatory technical standards on which this

Regulation is based, 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 ADOPTED THIS REGULATION:

SECTION 1

GENERAL PROVISIONS

Article 1

Methodology for calculating Additional Valuation Adjustments (AVAs)

In order to ensure that the prudent valuation of their fair-valued positions achieves an appropriate degree of certainty in accordance with Article 105 of Regulation (EU) No 575/2013, institutions shall calculate the additional valuation adjustments ('AVAs') necessary to adjust the fair values to the prudent value and shall calculate these AVAs quarterly according to the method provided in Section 3, unless they meet the conditions for applying the method provided in Section 2.

Article 2

Definitions

For the purpose of this Regulation the following definitions shall apply:

- (a) 'valuation position' means a financial instrument or commodity or portfolio of financial instruments or commodities held in both trading and non-trading books, which are measured at fair value.
- (b) 'valuation input' means a market observable or non-observable parameter or matrix of parameters that influences the fair value of a valuation position.
- (c) 'valuation exposure' means the amount of a valuation position which is sensitive to the movement in a valuation input.

Article 3

Sources of market data

1. Where institutions calculate AVAs based on market data, they shall consider the same range of market data used in the independent price verification ('IPV') process of Article 105(8) of Regulation (EU) No 575/2013, as relevant, subject to the adjustments described in this article.

2. Institutions shall consider a full range of available and reliable market data sources to determine a prudent value including each of the following, where relevant:

- (a) Exchange prices in a liquid market;
- (b) Trades in the exact same or very similar instrument, either from the institution's own records or, where available, trades from across the market;
- (c) Tradable quotes from brokers and other market participants;
- (d) Consensus service data;

- (e) Indicative broker quotes; and
- (f) Counterparty collateral valuations.

3. For cases where an expert-based approach is applied for the purpose of Articles 9 to 11 alternative methods and sources of information shall be considered, including each of the following, where relevant:

- (a) The use of proxy data based on similar instruments for which sufficient data is available;
- (b) The application of prudent shifts to valuation inputs; and
- (c) The identification of natural bounds to the value of an instrument.

SECTION 2

SIMPLIFIED APPROACH FOR THE DETERMINATION OF AVAS

Article 4

Conditions for use of the simplified approach

1. Institutions may apply the simplified approach described in this Section only if the sum of the absolute value of fair-valued assets and liabilities, as stated in the institution's financial statements under the applicable accounting framework, is less than EUR15bn.
2. Exactly matching, offsetting fair-valued assets and liabilities are excluded from the calculation of paragraph 1. For fair-valued assets and liabilities for which a change in accounting valuation has a partial or zero impact on Common Equity Tier 1 ('CET1') capital, their values shall only be included in proportion to the impact of the relevant valuation change on CET1 capital.
3. This threshold shall apply on an individual and consolidated basis. Where the threshold is breached on a consolidated basis, the core approach shall be applied to all entities included in the consolidation.
4. Where institutions applying the simplified approach fail to meet the condition of paragraph 1 for two consecutive quarters, they shall immediately notify the relevant competent authority and determine a plan to implement the approach referred to in Section 3 within the following two quarters.

Article 5

Determination of AVAs under the simplified approach

Institutions shall calculate AVAs under the simplified approach as 0.1% of the sum of the absolute value of fair-valued assets and liabilities which are included within the threshold calculation in Article 4.

Article 6

Determination of aggregate AVAs calculated under the simplified approach

For institutions applying the simplified approach, the aggregate AVA for the purpose of Article 1 shall be the AVA resulting from the calculation of Article 5.

SECTION 3

CORE APPROACH FOR THE DETERMINATION OF AVAS

Article 7

Overview of the core approach

1. Institutions shall calculate AVAs under the core approach, by applying the following two-step approach:

(a) they shall calculate AVAs for each of the categories described in paragraphs (10) and (11) of Article 105 of Regulation (EU) No 575/2013 ('category level AVAs') according to paragraph 2;

(b) they shall sum the amounts resulting from step (a) for each of the category level AVAs to provide the aggregate AVA for the purposes of Article 1.

2. For the purposes of point (a) of paragraph 1, institutions shall calculate category level AVAs in one of the following ways:

(a) According to Articles 9 to 17;

(b) Where the application of Articles 9 to 17 is not possible for certain positions, according to a 'fall-back approach', whereby they shall identify the related financial instruments and calculate an AVA as the sum of:

- (i) 100% of the net unrealised profit on the related financial instruments;
- (ii) 10% of the notional value of the related financial instruments in the case of derivatives;
- (iii) 25% of the absolute value of the difference between the fair value and the unrealised profit, as determined in (i), of the related financial instruments in the case of non-derivatives.

For the purposes of point (i) unrealised profit shall mean the change, where positive, in fair value since trade inception, determined on a first-in-first-out basis.

Article 8

General provisions for the calculations of AVAs under the core approach

1. For fair-valued assets and liabilities for which a change in accounting valuation has a partial or zero impact on CET1 capital, AVAs shall only be calculated based on the proportion of the accounting valuation change that impacts CET1 capital.
2. In relation to the category level AVAs described in Articles 14 to 17, institutions shall aim to achieve a level of certainty in the prudent value that is equivalent to that set out in Articles 9 to 13.
3. AVAs shall be considered to be the excess of valuation adjustments required to achieve the identified prudent value, over any adjustment applied in the institution's fair value that can be identified as addressing the same source of valuation uncertainty as the AVA. Where an adjustment applied in the institution's fair value cannot be identified as addressing a specific AVA category at the level at which the relevant AVAs are calculated, that adjustment shall not be included in the calculation of AVAs.
4. AVAs shall always be positive, including at valuation exposure level, category level, both pre and post aggregation.

Article 9

Calculation of market price uncertainty AVA

1. Market price uncertainty AVAs shall be calculated at valuation exposure level (*'individual market price uncertainty AVAs'*).
2. The market price uncertainty AVA shall only be assessed to have zero value where both of the following conditions are met:
 - (a) the institution has firm evidence of a tradable price for a valuation exposure or a price can be determined from reliable data based on a liquid two-way market as defined in Article 338 of Regulation (EU) No 575/2013;
 - (b) the sources of market data set out in Article 3 paragraph 2 do not indicate any material valuation uncertainty.
3. Where a valuation exposure cannot be shown to have a zero AVA, when assessing the market price uncertainty AVA institutions shall use the data sources defined in Article 3. In this case the calculation of the market price uncertainty AVA shall be performed as described in paragraphs 4 and 5.
4. Institutions shall calculate AVAs on valuation exposures related to each valuation input used in the relevant valuation model. The granularity at which those AVAs shall be assessed shall be determined as follows:

- (a) For non-derivative valuation positions, or derivative positions which are marked to market, the valuation input shall be one of the following:
 - (i) Decomposed into more than one valuation inputs, such that all inputs required to calculate an exit price for the position are treated separately;
 - (ii) The price of the instrument.
- (b) Where a valuation input consists of a matrix of parameters, AVAs shall be calculated based on the valuation exposures related to each parameter within that matrix. Where a valuation input does not refer to tradable instruments, institutions shall map the valuation input and the related valuation exposure to a set of market tradable instruments. Institutions may reduce the number of parameters of the valuation input for the purpose of calculating AVAs using any appropriate methodology provided the reduced parameters satisfy all of the following requirements:
 - (1) The total value of the reduced valuation exposure is the same as the total value of the original valuation exposure;
 - (2) The reduced set of parameters can be mapped to a set of market tradable instruments;
 - (3) The ratio of variance measure 2 over variance measure 1, based on historical data from the most recent 100 trading days, is less than 0.1

where

- (1) Variance measure 1 shall mean profit and loss variance of the valuation exposure based on the unreduced valuation input;
 - (2) Variance measure 2 shall mean profit and loss variance of the valuation exposure based on the unreduced valuation input minus the valuation exposure based on the reduced valuation input.
- (c) Where a reduced number of parameters is used for the purpose of calculating AVAs, the determination that the above criteria are met shall be subject to independent control function review of the netting methodology and internal validation on at least an annual basis.

5. Market price uncertainty AVAs shall be determined as follows:

- (a) Where sufficient data exists to construct a range of plausible values for a valuation input:
 - (i) For a valuation input where the range of plausible values is based on exit prices, institutions shall estimate a point within the range where they are 90% confident they could exit the valuation exposure at that price or better.
 - (ii) For a valuation input where the range of plausible values is created from mid prices, institutions shall estimate a point within the range where they are 90% confident that the mid value they could achieve in exiting the valuation exposure would be at that price or better.

- (b) Where insufficient data exists to construct a plausible range of values for a valuation input, institutions shall use an expert-based approach using qualitative and quantitative information available to achieve a level of certainty in the prudent value of the valuation input that is equivalent to that targeted under (a). Institutions shall notify competent authorities of the valuation exposures for which this approach is applied, and the methodology used to determine the AVA.
- (c) Institutions shall calculate the market price uncertainty AVA based on one of the following approaches:
 - (1) They shall apply the difference between the valuation input values estimated according to either point (a) or point (b), and the valuation input values used for calculating fair value to the valuation exposure of each valuation position;
 - (2) They shall combine the valuation input values estimated according to either point (a) or point (b) and they shall revalue valuation positions based on those values. Institutions shall then take the difference between the revalued positions and fair-valued positions.

6. Institutions shall calculate the total category level AVA for market price uncertainty by applying to individual market price uncertainty AVAs the formulae for either Method 1 or Method 2 as referred to in the Annex.

Article 10

Calculation of close-out costs AVA

1. Close-out costs AVAs shall be calculated at valuation exposure level ('*individual close-out costs AVAs*').
2. When an institution has calculated a market price uncertainty AVA for a valuation exposure based on an exit price, the close-out cost AVA may be assessed to have zero value.
3. Where an institution applies the derogation referred to in paragraph (5) of Article 105 of Regulation (EU) No 575/2013, the close-out costs AVA may be assessed to have zero value, on the condition that the institution provides evidence that it is 90% confident that sufficient liquidity exists to support the exit of the related valuation exposures at mid-price.
4. Where a valuation exposure cannot be shown to have a zero close-out costs AVA, institutions shall use the data sources defined in Article 3. In this case the calculation of the close-out costs AVA shall be performed as described in paragraphs 5 and 6.
5. Institutions shall calculate close-out costs AVAs on valuation exposures related to each valuation input used in the relevant valuation model. The granularity at which those close-out costs AVAs shall be assessed shall be determined as follows:

- (a) For non-derivative valuation positions, or derivative positions which are marked to market, the valuation input shall be one of the following:
 - (i) Decomposed into more than one valuation inputs, such that all inputs required to calculate an exit price for the position are treated separately;
 - (ii) The price of the instrument.
- (b) Where a valuation input consists of a matrix of parameters, institutions shall assess the close-out cost AVA based on the valuation exposures related to each parameter within that matrix. Where a valuation input does not refer to tradable instruments, institutions shall explicitly map the valuation input and the related valuation exposure to a set of market tradable instruments. Institutions may reduce the number of parameters of the valuation input for the purpose of calculating AVAs using any appropriate methodology provided the reduced parameters satisfy all of the following requirements:
 - (1) The total value of the reduced valuation exposure is the same as the total value of the original valuation exposure;
 - (2) The reduced set of parameters can be mapped to a set of market tradable instruments;
 - (3) The ratio of variance measure 2 over variance measure 1, based on historical data from the most recent 100 trading days, is less than 0.1

where

- (1) Variance measure 1 shall mean profit and loss variance of the valuation exposure based on the unreduced valuation input;
 - (2) Variance measure 2 shall mean profit and loss variance of the valuation exposure based on the unreduced valuation input minus the valuation exposure based on the reduced valuation input.
- (c) Where a reduced number of parameters is used for the purpose of calculating AVAs, the determination that the above criteria are met shall be subject to independent control function review and internal validation on at least an annual basis.

6. Close-out costs AVAs shall be determined as follows:

- (a) Where sufficient data exists to construct a range of plausible bid-offer spreads for a valuation input, institutions shall estimate a point within the range where they are 90% confident that the spread they could achieve in exiting the valuation exposure would be at that price or better.
- (b) Where insufficient data exists to construct a plausible range of bid-offer spreads, institutions shall use an expert-based approach using qualitative and quantitative information available to achieve a level of certainty in the prudent

value that is equivalent to that targeted where a range of plausible values is available. Institutions shall notify competent authorities of the valuation exposures for which this approach is applied, and the methodology used to determine the AVA.

- (c) Institutions shall calculate the close-out costs AVA by applying 50% of the estimated bid-offer spread calculated in accordance with either point (a) or point (b) to the valuation exposures related to the valuation inputs defined in paragraph 5.

7. Institutions shall calculate the total category level AVA for close-out costs by applying to the individual close-out costs AVAs the formulae for either Method 1 or Method 2 as referred to in the Annex.

Article 11

Calculation of Model risk AVA

1. Institutions shall estimate a model risk AVA for each valuation model ('*individual model risk AVA*') by considering valuation model risk which arises due to the potential existence of a range of different models or model calibrations, which are used by market participants, and the lack of a firm exit price for the specific product being valued. Institutions shall not consider valuation model risk which arises due to calibrations from market derived parameters, which shall be captured according to Article 9.

2. The model risk AVA shall be calculated using one of the approaches defined in paragraphs 3 and 4.

3. Where possible, institutions shall calculate the model risk AVA by determining a range of plausible valuations produced from alternative appropriate modelling and calibration approaches. In this case, institutions shall estimate a point within the resulting range of valuations where they are 90% confident they could exit the valuation exposure at that price or better.

4. Where institutions are unable to use the approach defined in paragraph 3, they shall apply an expert-based approach to estimate the model risk AVA. The expert-based approach shall consider all of the following: complexity of products relevant to the model; diversity of possible mathematical approaches and model parameters, where those model parameters are not related to market variables; the degree to which the market for relevant products is 'one way'; the existence of unhedgeable risks in relevant products; and the adequacy of the model in capturing the behaviour of the pay-off of the products in the portfolio. Institutions shall notify competent authorities of the models for which this approach is applied, and the methodology used to determine the AVA.

5. Where institutions use the method described in paragraph 4, the prudence of the method shall be confirmed annually by comparing the following:

- (a) the AVAs calculated using the method described in paragraph 4, if it were applied to a material sample of the valuation models for which the institution applies the method in paragraph 3; and

- (b) the AVAs produced by the method in paragraph 3 for the same sample of valuation models.

6. Institutions shall calculate the total category level AVA for model risk by applying to individual model risk AVAs the formulae for either Method 1 or Method 2 as referred to in the Annex.

Article 12

Calculation of Unearned credit spreads AVA

1. Institutions shall calculate the unearned credit spreads AVA to reflect the valuation uncertainty in the adjustment necessary according to the applicable accounting framework to include the current value of expected losses due to counterparty default on derivative positions.
2. Institutions shall include the element of the AVA relating to market price uncertainty within the market price uncertainty AVA category. The element of the AVA relating to close-out cost uncertainty shall be included within the close-out costs AVA category. The element of the AVA relating to model risk shall be included within the model risk AVA category.

Article 13

Calculation of Investing and funding costs AVA

1. Institutions shall calculate the investing and funding costs AVA to reflect the valuation uncertainty in the funding costs used when assessing the exit price according to the applicable accounting framework.
2. Institutions shall include the element of the AVA relating to market price uncertainty within the market price uncertainty AVA category. The element of the AVA relating to close-out cost uncertainty shall be included within the close-out costs AVA category. The element of the AVA relating to model risk shall be included within the model risk AVA category.

Article 14

Calculation of Concentrated positions AVA

1. Institutions shall estimate a concentrated position AVA for concentrated valuation positions ('*individual concentrated positions AVA*') by applying the following three-step approach:
 - (a) Firstly, they shall identify concentrated valuation positions;
 - (b) Secondly, for each identified concentrated valuation position, where a market price applicable for the size of the valuation position is unavailable, they shall estimate a prudent exit period;

- (c) Only where the prudent exit period exceeds 10 days, they shall estimate an AVA taking into account the volatility of the valuation input, the volatility of the bid offer spread and the impact of the hypothetical exit strategy on market prices.
2. For the purposes of point (a) of paragraph 1, the identification of concentrated valuation positions shall consider all of the following:
- (a) the size of all valuation positions relative to the liquidity of the related market;
 - (b) the institution's ability to trade in that market;
 - (d) the average daily market volume and typical daily trading volume of the institution.
- Institutions shall establish and document the methodology applied to determine concentrated valuation positions for which a concentrated positions AVA shall be calculated.
3. Institutions shall calculate the total category level AVA for concentrated positions AVA as the sum of individual concentrated positions AVAs.

Article 15

Calculation of Future administrative costs AVA

1. Where an institution calculates market price uncertainty and close-out cost AVAs for a valuation exposure, which imply fully exiting the exposure, the institution may assess a zero AVA for future administrative costs.
2. Where a valuation exposure cannot be shown to have a zero AVA according to paragraph 1, institutions shall calculate the future administrative cost AVA (*'individual future administrative costs AVA'*) considering the administrative costs and future hedging costs over the expected life of the valuation exposures for which a direct exit price is not applied for the close-out costs AVA, discounted using a rate which approximates the risk free rate.
3. For the purposes of paragraph 2, administrative costs shall include all incremental staffing and fixed costs that will be incurred in managing the portfolio but a reduction in these costs may be assumed as the size of the portfolio reduces.
4. Institutions shall calculate the total category level AVA for future administrative costs AVA as the sum of individual future administrative costs AVAs.

Article 16

Calculation of Early termination AVA

Institutions shall estimate an early termination AVA considering the potential losses arising from non-contractual early terminations of client trades. The early termination AVA shall be calculated taking into account the percentage of client trades that have historically terminated early and the losses that arise in those cases.

Article 17

Calculation of Operational risk AVA

1. Institutions shall estimate an operational risk AVA by assessing the potential losses that may be incurred as a result of operational risk related to valuation processes. This estimate shall include an assessment of valuation positions judged to be at-risk during the balance sheet substantiation process, including those due to legal disputes.
2. Where an institution applies the Advanced Measurement Approach for Operational Risk as defined in Title III Chapter 4 of Regulation (EU) No 575/2013, it may report a zero operational risk AVA on condition that it provides evidence that the operational risk relating to valuation processes, as determined by complying with the requirements of paragraph 1, is fully accounted for by the Advanced Measurement Approach calculation.
3. In all other cases, the institution shall calculate an operational risk AVA of 10% of the sum of the aggregated category level AVAs for market price uncertainty and close-out costs.

SECTION 4

DOCUMENTATION, SYSTEMS AND CONTROLS

Article 18

Documentation requirements

1. Institutions shall document appropriately the prudent valuation methodology. This documentation shall include internal policies providing guidance on:
 - (a) The range of methodologies for quantifying AVAs for each valuation position;
 - (b) The hierarchy of methodologies for each asset class, product, or valuation position;
 - (c) The hierarchy of market data sources used in the AVA methodology;

- (d) The required characteristics of market data to justify a zero AVA for each asset class, product, or valuation position;
 - (e) The methodology applied where an expert based approach is used to determine an AVA;
 - (f) The methodology for determining whether a valuation position requires a concentrated position AVA;
 - (g) The assumed exit horizon for the purpose of calculating AVAs for concentrated positions, where relevant;
 - (h) The fair-valued assets and liabilities for which a change in accounting valuation has a partial or zero impact on CET1 capital according to paragraph 2 of Article 4 and paragraph 1 of Article 8.
2. Institutions shall also maintain records to allow the calculation of AVAs at valuation exposure level to be analysed, and information from the AVA calculation process shall be provided to senior management to allow an understanding of the level of valuation uncertainty on the institution's portfolio of fair-valued positions.
3. The documentation specified in paragraph 1 shall be reviewed at least annually and approved by senior management.

Article 19

Systems and controls requirements

1. AVAs shall be authorised initially, and monitored subsequently, by an independent control unit.
2. Institutions shall have effective controls related to the governance of all fair-valued positions, and adequate resources to implement those controls and ensure robust valuation processes even during a stressed period. These shall include all of the following:
 - (a) At least an annual review of valuation model performance;
 - (b) Management sign-off on all significant changes to valuation policies;
 - (c) A clear statement of the institution's appetite for exposure to positions subject to valuation uncertainty which is monitored at an aggregate institution-wide level;
 - (d) Independence in the valuation process between risk taking and control units; and
 - (e) A comprehensive internal audit process related to valuation processes and controls.

3. Institutions shall ensure there are effective and consistently applied controls related to the valuation process for fair-valued positions. These controls shall be subject to regular internal audit review. The controls shall include all of the following:

- (a) A precisely defined institution-wide product inventory, ensuring that every valuation position is uniquely mapped to a product definition;
- (b) Valuation methodologies, for each product in the inventory covering choice and calibration of model, fair value adjustments, AVAs, independent price verification methodologies applicable to the product, and the measurement of valuation uncertainty;
- (c) A validation process ensuring that, for each product, both the risk-taking and relevant control departments approve the product-level methodologies described in (b) and certify that they reflect the actual practice for every valuation position mapped to the product;
- (d) Defined thresholds based on observed market data for determining when valuation models are no longer sufficiently robust;
- (e) A formal IPV process based on prices independent from the relevant trading desk;
- (f) A new product approval processes referencing the product inventory and involving all internal stakeholders relevant to risk measurement, risk control, financial reporting and the assignment and verification of valuations of financial instruments;
- (g) A new deal review process to ensure that pricing data from new trades are used to assess whether valuations of similar valuation exposures remain appropriately prudent.

Article 20

Entry into force

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

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

*For the Commission
The President*

*[For the Commission
On behalf of the President*

[Position]

ANNEX
COMMISSION DELEGATED REGULATION (EU) No .../..

supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards for prudent valuation under Article 105 (14)

Annex

Formulae to be used for the purpose of aggregating AVAs under Articles 9(6), 10(7) and 11(6)

Method 1:

$$\begin{aligned} APVA &= (FV - PV) - 50\% \cdot (FV - PV) \\ &= 50\% \cdot (FV - PV) \\ AVA &= \sum APVA \end{aligned}$$

Method 2:

$$\begin{aligned} APVA &= \max\{0, (FV - PV) - 50\% \cdot (EV - PV)\} \\ &= \max\{0, FV - 50\% \cdot (EV + PV)\} \\ AVA &= \sum APVA \end{aligned}$$

Where:

FV = The valuation exposure level fair value after any accounting adjustment applied in the institution's fair value that can be identified as addressing the same source of valuation uncertainty as the relevant AVA.

PV = The valuation exposure level prudent value determined in accordance with this Regulation.

EV = The expected value at a valuation exposure level taken from a range of possible values.

APVA = The valuation exposure level AVA after adjusting for aggregation.

AVA = The total category level AVA after adjusting for aggregation.

4. Accompanying documents

4.1 Worked example of the calculation of market price uncertainty and close-out costs AVAs under the core approach

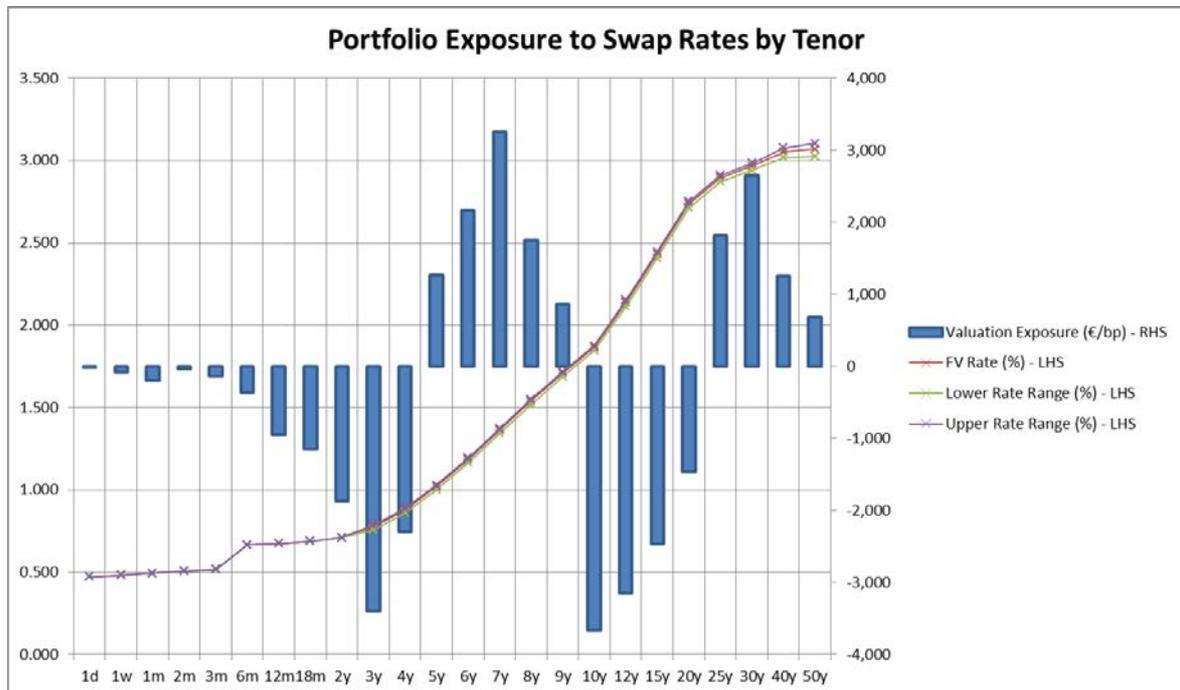
The example could not be updated following the revision of these RTS and still considers a volatility test based on a volatility measure instead of the variance measure introduced by the present revision. However, the example has been kept for information purposes.

The example described below is based on an interest rate swap portfolio consisting of a large number of long and short interest rate swaps, with a variety of maturities, sizes and fixed rates. For the purpose of the example the institution holding the portfolio is not assumed to be a significant market maker.

The portfolio of instruments are assumed to be valued using the same (mid-price) Fair Value Yield Curve which has 24 input parameters (ranging in maturities from 1 day to 50 years). This Fair Value Yield Curve is based on highly liquid cash prices for parameters up to 2 months, liquid exchange-traded futures prices from 3 month up to 2 years and swap prices from 3 years to 50 years, which are relatively liquid at shorter maturities but increasingly illiquid at longer maturities.

During the end of day (EOD) process, when the institution produces its EOD values, it also produces EOD sensitivities (the valuation change that would be caused by an input parameter being increased by 1 basis point). The Fair Value Yield Curve and the sensitivities of the portfolio are shown in Figure 1 below (the graph also shows the range of plausible yields for each parameter, which are used at a later stage in the AVA estimation).

Figure 1.: Fair Value Yield Curve with associated valuation exposures



In the process described below, the requirements of Articles 9 and 10 of the draft RTS are followed to arrive at AVAs for market price uncertainty and close-out costs. References to paragraphs relate to the paragraphs of Article 9 (for market price uncertainty) and Article 10 (for close-out costs).

4.1.1 Valuation exposure level market price uncertainty AVA calculation

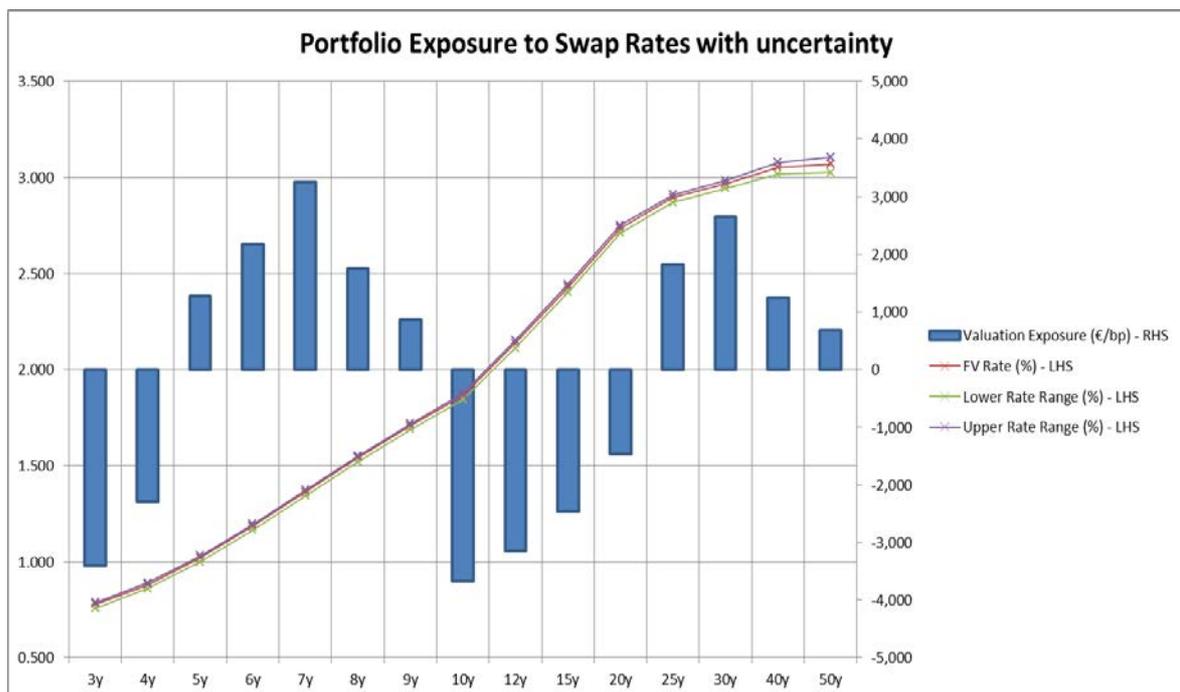
Paragraph 1 states that the AVA should be calculated at valuation exposure level. A valuation exposure is defined as the amount of a valuation position which is sensitive to the movement in either the price of a fungible security or valuation input. A valuation input is defined as a parameter or as a matrix of parameters that influences the fair value.

In this example, the valuation input is the yield curve which is a vector of parameters that influence the fair value. The institution may decide to calculate the AVA for each parameter individually or for the vector of parameters together. In this example, the institution chooses that the AVA will be calculated on the vector of parameters together.

Paragraph 2 states that the existence of evidence of a tradable price from a liquid two-way market would provide sufficient evidence that the AVA for a valuation exposure to be assessed to have a zero value. In this example, the short end of the Fair Value Yield Curve does have the level of liquidity required to support a zero AVA however the longer maturities do not – therefore since the institution is calculating an AVA for the full vector of parameters the AVA may not be assessed as having zero value at this point in the process.

However, the institution may choose to isolate the portions of the yield curve for which there is no valuation uncertainty, and only perform calculations on the portion for which there is uncertainty, as in Figure 2 below. This means that only 15 points on the curve are being considered for the market price uncertainty AVA (since all points below the 3 year maturity have sufficient evidence that the AVA for a valuation exposure on each maturity would be zero):

Figure 2.: Fair Value Yield Curve with associated valuation exposures for those rates which have uncertainty



Paragraph 3 states that if there is not sufficient evidence to show that the AVA is non-zero, the data sources defined in Article 3 shall be used to calculate the AVA in the manner described in paragraphs 4 and 5.

Paragraph 4 describes how the institution may calculate the AVA based on the sensitivity to every parameter in the valuation input. However, the paragraph permits institutions to reduce the dimensions of the valuation input (i.e. the number of parameters for which valuation sensitivity should be analysed) provided the reduced set of parameters meet certain conditions. In particular:

- As part of the process of reducing the dimensions of the valuation input, the valuation exposure shall be translated to the same reduced dimensions. The resulting total net valuation exposure may not change; and
- The ratio of volatility measure 2 over volatility measure 1 as defined below, based on historical data from the most recent 100 trading days, is less than 0.1:

- Volatility measure 1: Profit and Loss volatility of the valuation exposure based on the unreduced valuation input.
- Volatility measure 2: Profit and Loss volatility of the valuation exposure based on the unreduced valuation input minus the valuation exposure based on the reduced valuation input.

In this example the institution could decide to reduce their AVA calculation in two ways, which can both be applied to the same portfolio:

- Netting the exposure between different points – for example a long exposure of 1000 to the 9y swap rate could be netted against a short exposure of -3000 to the 10y swap rate, leaving a single exposure of -2000 to the 10y swap rate. This process reduces the dimensionality of the calculation and the accuracy of the calculation.
- The netting methodology used will normally consider the distance between points on a curve – for example, if a 9y swap rate exposure is netted into the 5y and 10y points, then most of the risk will be mapped to the 10y point, but some of it will be mapped to the 5y point.

Mapping outright exposures to liquid spread exposures – for example a long exposure of 1000 to the 5yr swap rate and a short exposure of -3000 to the 10y swap rate could be remapped to an exposure of -1000 to the 10y – 5y spread, leaving a residual -2000 exposure to the 10y swap rate. This process does not reduce the dimensionality or accuracy of the calculation, but still provides netting benefit within the AVA calculation.

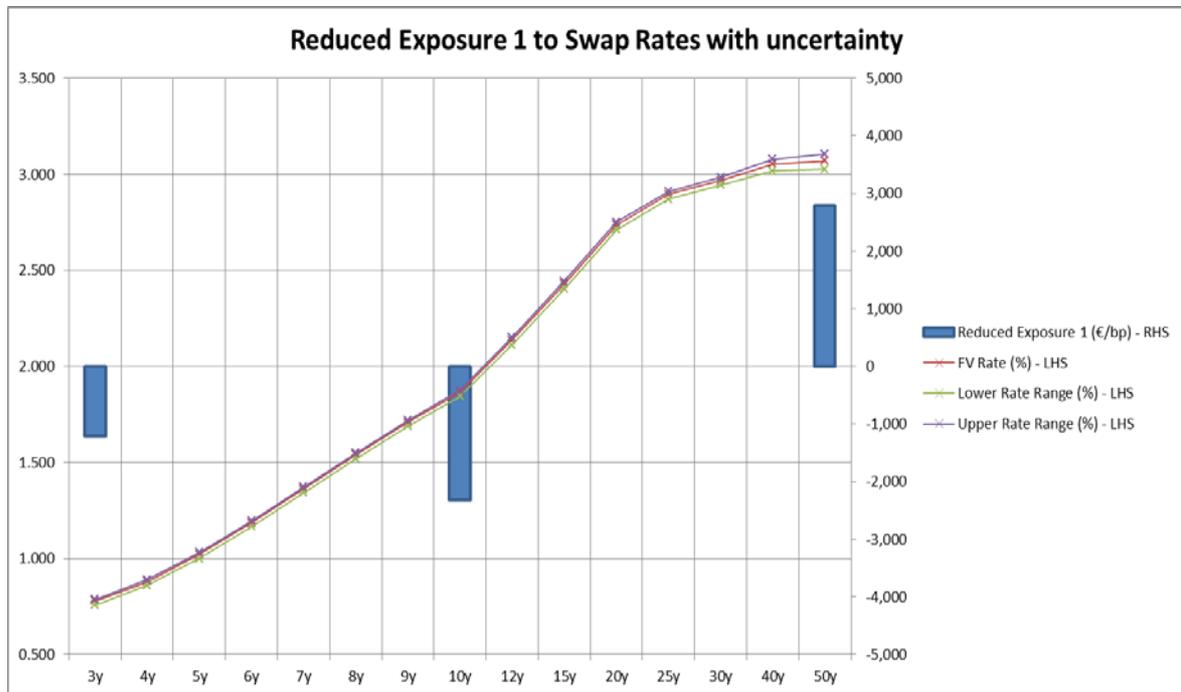
In order to determine a reduced valuation input which meets the criteria of paragraph 4, calculations have been performed on several alternative sets ('scenarios') of reduced valuation inputs for the portfolio:

- Exposures to a reduced valuation input of 3 parameters ('reduced exposure 1')
- Exposures to a reduced valuation input of 5 parameters ('reduced exposure 2')
- Exposures to a reduced valuation input of 7 parameters ('reduced exposure 3')

a. **Scenario 1: Exposure reduced to 3 parameters**

In the case of reduced exposure 1, the valuation exposure shown in Figure 2 was remapped to 3 points; 3y, 10y, 50y, as shown in Figure 3.

Figure 3.: Reduced Yield Curve of 3 parameters with associated valuation exposure



The institution decided to perform a second step, in which the long exposure to the 50y swap rate and the short exposure to the 10y swap rate were mapped to a 50y-10y spread trade as in Figure 4. This left a residual exposure to the 3y and 50y swap rates as shown in Figure 5.

In this case, the reduced valuation exposure that would be the basis for calculating the AVA would be comprised of the exposure to the 50y-10y spread and the residual exposures to the 3y and 50y swap rates.

Figure 4.: Reduced Yield Curve of 3 parameters with exposure to spread trades

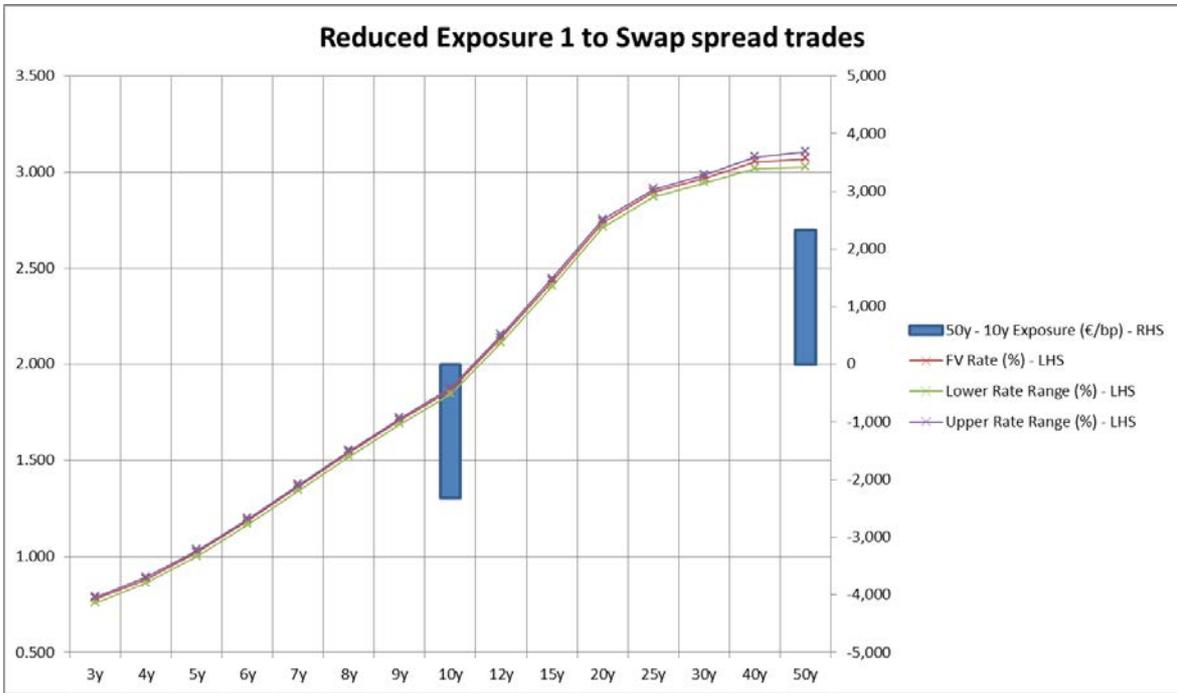
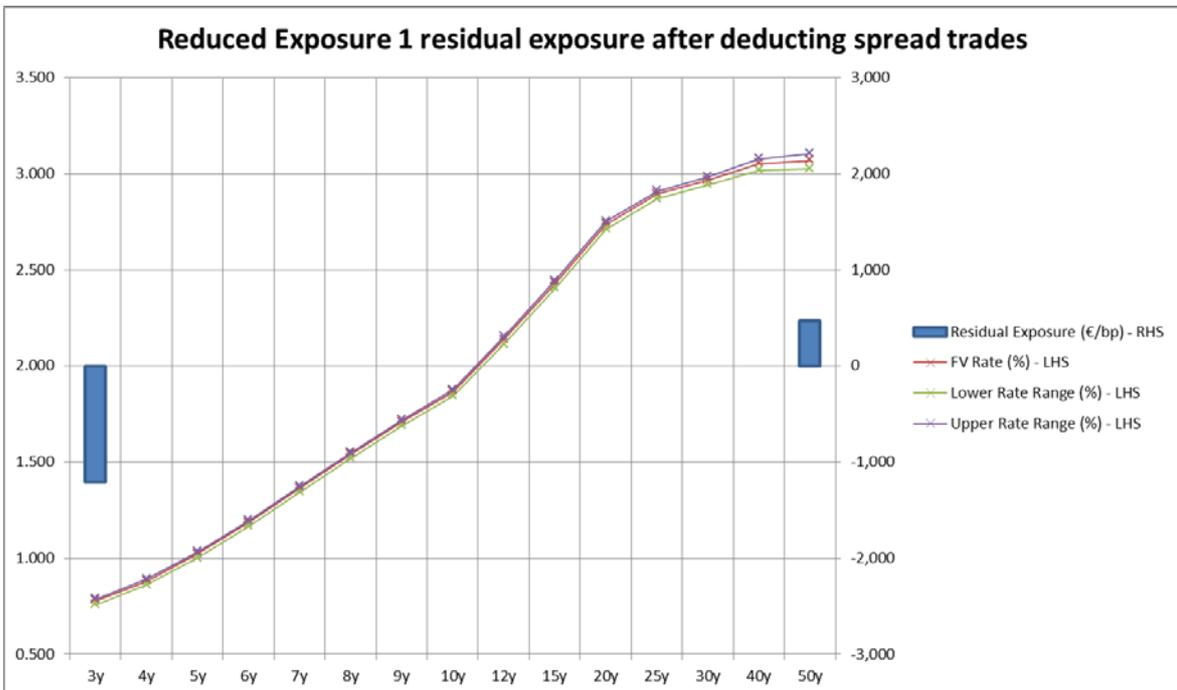


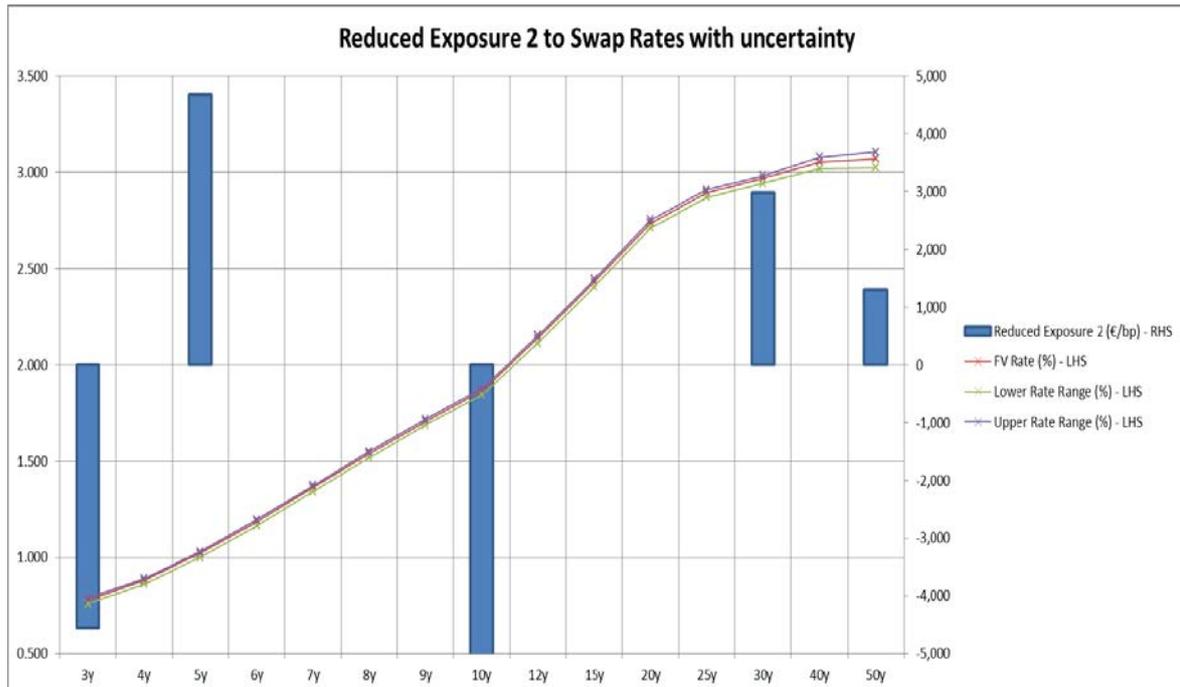
Figure 5.: Reduced Yield Curve of 3 parameters with residual exposure after removing spread trades



b. Scenario 2: Exposure reduced to 5 parameters

In the case of reduced exposure 2, the valuation exposure shown in Figure 2 was remapped to 5 points; 3y, 5y, 10y, 30y, 50y, as shown in Figure 6.

Figure 6.: Reduced Yield Curve of 5 parameters with associated valuation exposure



In this case 2 separate spreads trades were then mapped to the exposure; a long 5y exposure against a short 3y exposure, and a long 30y exposure against a short 10y exposure. This is shown in Figure 7. This left a residual exposure to the 5y, 10y and 50y swap rates as shown in Figure 8. The combination of these two sets of exposures would in this case be the basis of the AVA.

Figure 7.: Reduced Yield Curve of 5 parameters with exposure to spread trades

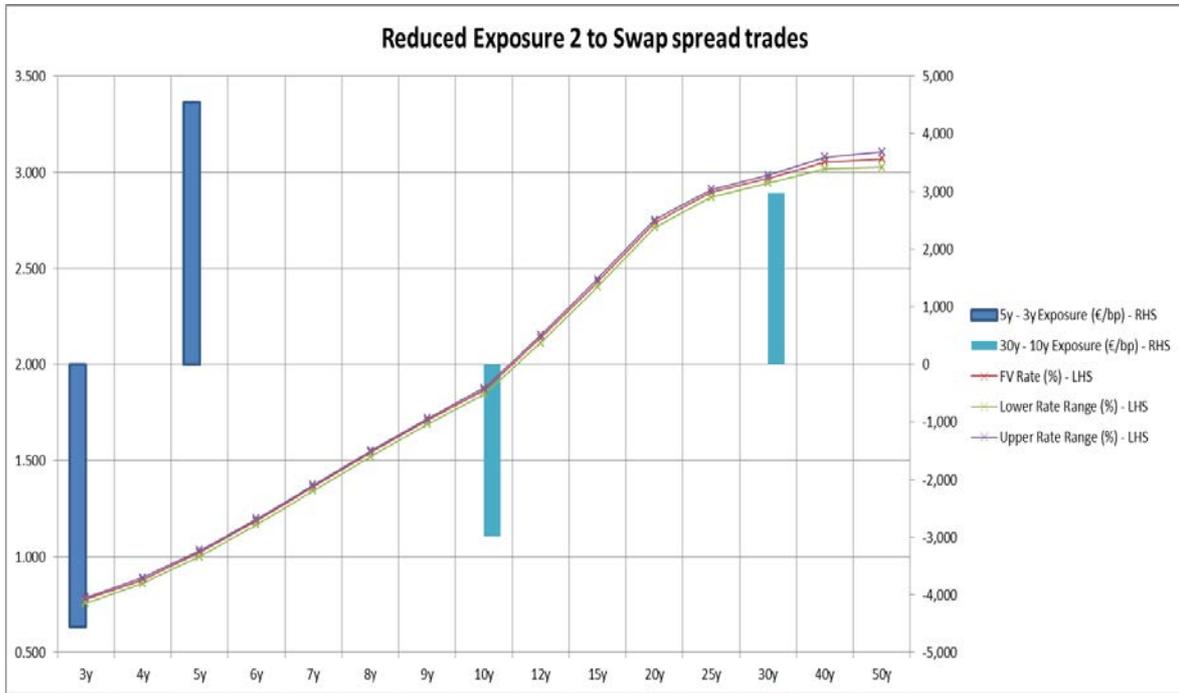
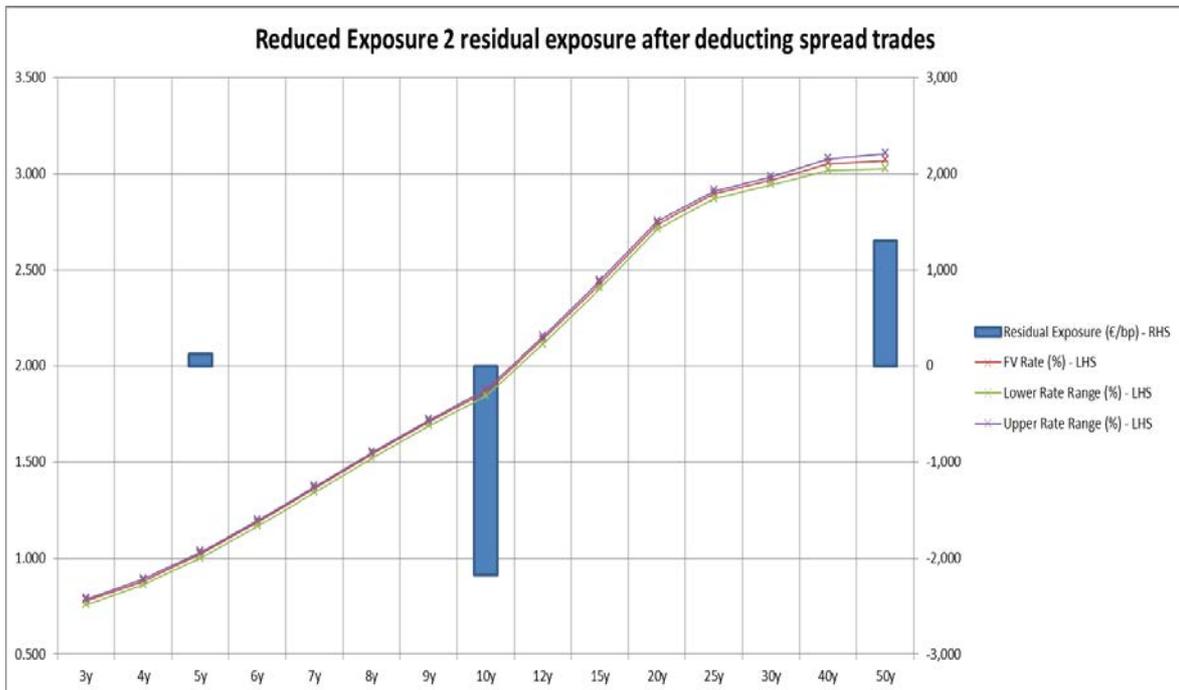


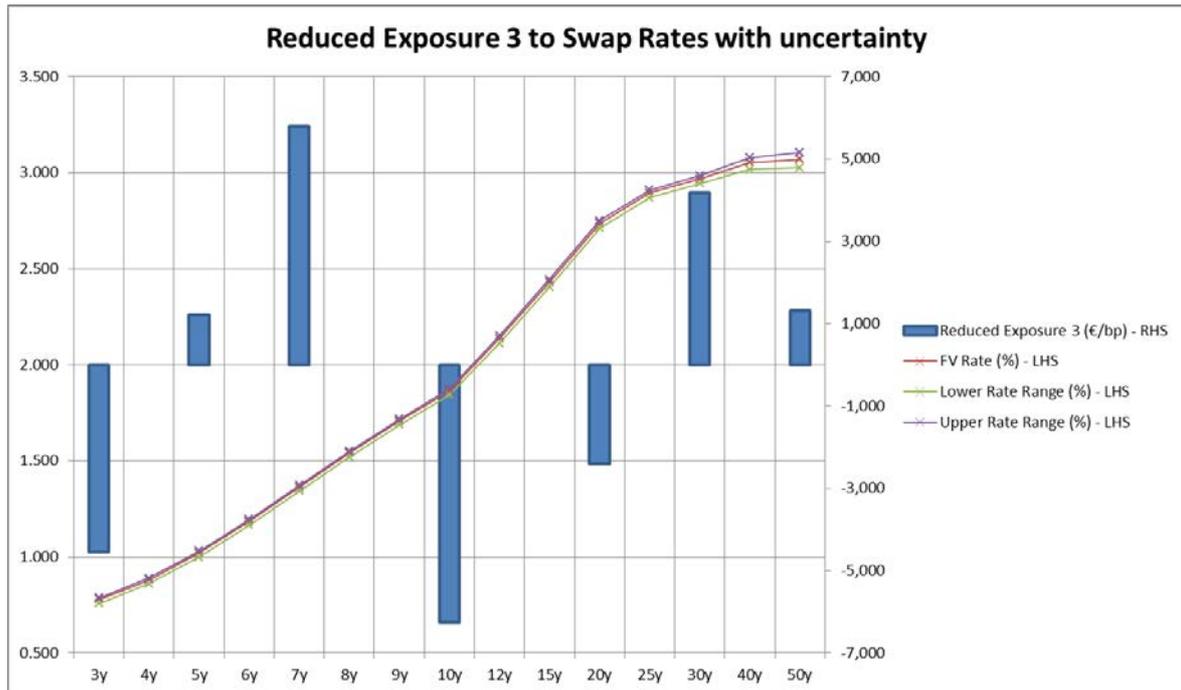
Figure 8.: Reduced Yield Curve of 5 parameters with residual exposure after removing spread trades



c. Scenario 3: Exposure reduced to 7 parameters

In the case of reduced exposure 3, the valuation exposure shown in Figure 2 was remapped to 7 points; 3y, 5y, 7y, 10y, 20y, 30y, 50y, as shown in Figure 9.

Figure 9.: Reduced Yield Curve of 7 parameters with associated valuation exposure



In this case 3 separate spreads trades were mapped to the exposure; a long 7y exposure against a short 3y exposure, a long 30y exposure against a short 10y exposure, and a long 50y exposure against a short 10y exposure. This is shown in Figure 10. This left a residual exposure to the 5y, 10y and 50y swap rates as shown in Figure 11. The combination of these two sets of exposures would in this case be the basis of the AVA.

Figure 10.: Reduced Yield Curve of 7 parameters with exposure to spread trades

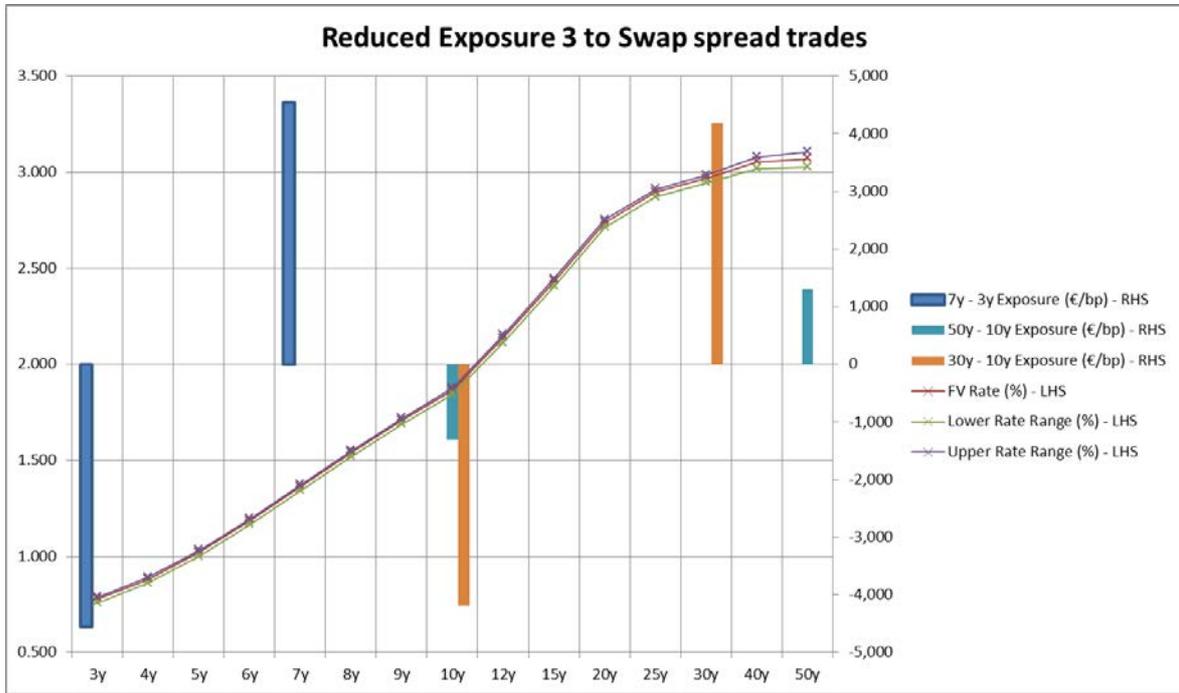
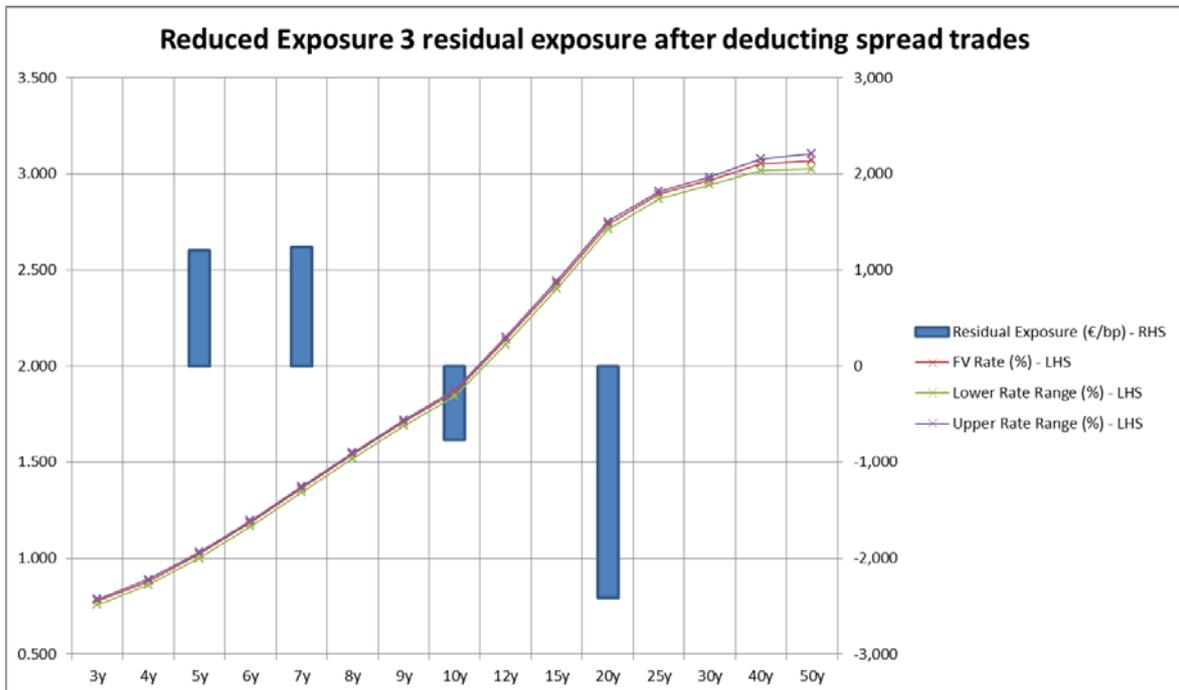


Figure 11.: Reduced Yield Curve of 7 parameters with residual exposure after removing spread trades



At a later stage in the process, the institution can assess which of these reduced exposures would meet the criteria of paragraph 4. Paragraph 5 describes how the market price uncertainty AVA should be calculated from the data sources in Article 3 and the reduced valuation inputs and valuation exposures determined by application of paragraph 4.

Firstly, for each parameter in the reduced valuation input, the available data should be used to determine whether there is a range of parameters available that enable the institution to estimate a value for which it has a 90% level of confidence that it could exit that parameter at that value or better. Whether this value is at the lower or higher end of the range of plausible values depends on whether the sensitivity of the portfolio is positive or negative for that parameter.

In this example, the level of liquidity and therefore available data for the input parameters to the curve is different depending on the maturity.

The institution had already determined that liquid deposits or exchange-traded futures prices are available for the parameters from 1d to 2y. The data shows that there exists a wide range of trades, bids and offers at consistent levels in the market at the time and date of the valuation. The institution can therefore be confident that, for these parameters, the prudent value would be the same as fair value.

Broker prices are available for the 3y – 7y swap rates as well as the 5y-3y and 7y-3y spread parameters. There are a range of broker prices available but there are some differences between them and uncertainty as to whether they could be traded on. For each of these parameters, there is a narrow band of uncertainty around their fair values.

For the 8y – 20y swap rates, the institution assesses broker prices to be less reliable as they are indicative only. A consensus pricing service is available and is assessed as being of good quality (the market is two-way and there are 10 accepted participants).

For the 25y – 50y swap rates as well as the long dated spread parameters, the consensus service is assessed as insufficient as there are only 3 submissions and none of the other data sources listed in Article 3 are available. The consensus service is used to provide the estimated fair value parameters. However, the institution considers the alternative approaches listed in Article 3 for situations where there is insufficient data and determines that the historical volatility of this parameter compared to more liquid shorter-dated parameters provides an indicative plausible range of prices with a similar level of confidence to that obtained for the rest of the curve.

The specific rates and spreads used in the calculations are shown in Figure 12 and the resulting lower and upper rate range points are shown in Figure 2.

Figure 12.: Parameters used in calculation of AVAs

	Source	FV Rate (%)	Upper Rate Range (%)	Lower Rate Range (%)
1d	Deposit	0.4725	0.4725	0.4725
1w	Deposit	0.48125	0.48125	0.48125
1m	Deposit	0.49313	0.49313	0.49313
2m	Deposit	0.50625	0.50625	0.50625
3m	Future	0.515	0.515	0.515
6m	Future	0.66688	0.66688	0.66688
12m	Future	0.6725	0.6725	0.6725
18m	Future	0.6875	0.6875	0.6875
2y	Future	0.71	0.71	0.71
3y	Swap Rate	0.7775	0.7875	0.7575
4y	Swap Rate	0.88	0.89	0.86
5y	Swap Rate	1.02	1.03	1
6y	Swap Rate	1.185	1.195	1.165
7y	Swap Rate	1.3625	1.3725	1.3425
8y	Swap Rate	1.54	1.55	1.52
9y	Swap Rate	1.7075	1.7175	1.6875
10y	Swap Rate	1.865	1.875	1.845
12y	Swap Rate	2.1375	2.1525	2.1125
15y	Swap Rate	2.43	2.445	2.405
20y	Swap Rate	2.7375	2.7525	2.7125
25y	Swap Rate	2.895	2.91	2.87
30y	Swap Rate	2.9675	2.9825	2.9425
40y	Swap Rate	3.0525	3.0775	3.0175
50y	Swap Rate	3.07	3.105	3.025
5y-3y	Spread	0.2425	0.2575	0.2275
7y-3y	Spread	0.585	0.6	0.57
30y-10y	Spread	0.83	0.85	0.81
50y-10y	Spread	1.205	1.245	1.165

For each of the scenarios of reduced valuation inputs, the P&L volatility and market price AVA have been calculated based on the above data and on historical data for 100 days in the case of P&L volatility, with the results displayed in Figure 12 together with the AVA calculated for the original valuation input. Figure 12 shows the AVAs before the institution maps the reduced exposure to spread trades.

The calculation of the AVA may be performed by multiplying the difference between the prudent parameter level and the fair value parameter level by the valuation exposure (or sensitivity) for each individual parameter in the reduced valuation input – this is the approach applied in the example. Alternatively, a new prudent yield curve could be built, taking either the upper or lower value from Figure 12, depending upon the exposure to each point. This could then be applied to

revalue the whole portfolio and the resulting AVA would be the difference between that revaluation and the valuation based on the fair value yield curve.

Figure 14 shows the AVA using the exposures after the institution maps to spread trades.

The results for the market price AVA calculation for each set of exposures in Figure 13 and Figure 14 show that for this example a minimum of 7 points are needed to achieve the standard required by paragraph 4 for reduction in P&L volatility (i.e. the appropriate scenario is Reduced Input 3). Note that this scenario results in a 21.7% reduction in AVA if no spread trades are used in the reduced valuation exposure, or a 48.1% reduction in AVA if spread trades are included, relative to if the original valuation input is used as the basis of the AVA.

Figure 13.: Market Price Uncertainty AVA where no spread trades are included in the reduced exposure

Without Spread Trades	P&L Volatility	P&L Volatility Reduction	Market Price AVA	Reduction in AVA relative to when unreduced valuation input used
Portfolio	EUR 11,432		EUR 57,185	
Reduced Input 1	EUR 3,405	-70.2%	EUR 16,113	-71.8%
Reduced Input 2	EUR 1,859	-83.7%	EUR 32,381	-43.4%
Reduced Input 3	EUR 1,112	-90.3%	EUR 44,750	-21.7%

Figure 14.: Market Price Uncertainty AVA where spread trades are included in the reduced exposure

With Spread Trades	P&L Volatility	P&L Volatility Reduction	Market Price AVA	Reduction in AVA relative to when unreduced valuation input used
Portfolio	EUR 11,432		EUR 57,185	
Reduced Input 1	EUR 3,405	-70.2%	EUR 12,623	-77.9%
Reduced Input 2	EUR 1,859	-83.7%	EUR 21,087	-63.1%
Reduced Input 3	EUR 1,112	-90.3%	EUR 29,690	-48.1%

In this example the institution would therefore estimate an AVA of EUR 29,690. If there are any fair value reserves held for market price uncertainty against this valuation exposure, according to Article 8 paragraph 3 these would be offset by the institution against the AVA to calculate the final AVA for market price uncertainty for the valuation exposure (the final AVA may not be less than zero and neither may the implied prudent value of any individual valuation exposure be greater from the institution's point of view than the fair value).

According to Paragraph 6, this final AVA would be included in the aggregation methodology described in Annex in order to calculate a total category level AVA for market price uncertainty.

4.1.2 Valuation exposure level close-out costs AVA calculation

Paragraph 1 states that the close-out costs AVA should be calculated at valuation exposure level. In this example, the valuation input on which the valuation exposure is based is the yield curve which is a vector of parameters (the same as for the market price uncertainty AVA). As is the case for the market price uncertainty AVA, the institution may decide to calculate the AVA for each parameter individually or for the vector of parameters together. In this example, the institution chooses that the AVA will be calculated on the vector of parameters together.

Paragraph 2 states that, where an institution has calculated the market price uncertainty AVA based on an exit price, the close-out costs AVA may be assessed to have zero value. In this example, the yield curve used by the institution to estimate the market price uncertainty AVA was a mid-price curve so the close-out costs AVA may not be immediately assessed as having zero value.

Paragraph 3 describes the evidence required by an institution to show that it is a significant market-maker in a product class and can therefore exit at mid-price implying the close-out costs AVA would have zero value. In this example, the institution is not considered to be a market maker so this approach is not applied.

Paragraph 4 states that if the close-out costs AVA is non-zero, the data sources defined in Article 3 must be used to calculate the AVA in the manner described in Paragraphs 5 and 6.

Paragraph 5 describes how the institution may calculate close-out costs AVAs individually for each parameter in the valuation input. However, in the same way as for the market price uncertainty AVA, the institution may also reduce the dimensions of the valuation input and consequently consider the valuation sensitivity to fewer individual parameters.

In this example, the analysis required to identify the appropriate reduced valuation input has already been performed for the market price uncertainty AVA, so the same reduced set of 7 parameters will be used for the close-out costs AVA calculation.

Paragraph 6 describes how the close-out costs AVA should be calculated from the data sources in Article 3 and the valuation inputs and valuation exposures in Paragraph 5.

As a first step, for each parameter in the reduced valuation input, the available data should be used to determine whether there is a range of bid/offer spreads available that enable the institution to estimate a value for which it has 90% level of confidence that it could exit that element at that value or better. In this example, the level of liquidity for the input parameters to the curve is different depending on their maturity.

Liquid deposits or exchange-traded futures prices are available for parameters from 1d to 2y. There are wide ranges of consistently priced trades, bids and offers in the market at the time and date of the valuation and so there is a significant range of evidence to support the level of the bid/offer spread. The institution assesses that it has a 90% level of confidence that the bid/offer spread that could be obtained if the short-dated parameters were to be exited would be the same as that used in assessing fair value close-out costs.

Broker prices are available for the 3y – 7y swap rates as well as the 5y-3y and 7y-3y spread parameters. There is a range of broker prices available which include bid/offer quotes but with some uncertainty as to whether they could be traded on. The institution assesses that it has 90% level of confidence that the

bid/offer spread that could be obtained if the short-dated parameters were to be exited would be slightly wider than the spread used for fair value close-out costs.

At the remaining swap rates and spread parameters, the broker prices are assessed as less reliable as they are indicative only. The available consensus pricing service does not provide bid/offer spread quotes. The institution therefore considers alternative sources of evidence as described in Article 3 paragraph 3 and determines that there is sufficient (although infrequent) evidence of two-way quotes during the previous months that it can use to assess a range of values, with a similar level of confidence to that achieved for the shorter-dated parameters.

The specific rates and spreads used in the example calculations are shown in Figure 15.

Figure 15.: Parameters used in calculation of AVAs

	Source	FV Bid/Offer Spread	Prudent Bid/Offer Spread
1d	Deposit	0.0025	0.0025
1w	Deposit	0.0025	0.0025
1m	Deposit	0.0025	0.0025
2m	Deposit	0.0025	0.0025
3m	Future	0.0025	0.0025
6m	Future	0.0025	0.0025
12m	Future	0.0025	0.0025
18m	Future	0.0025	0.0025
2y	Future	0.0025	0.0025
3y	Swap Rate	0.01	0.015
4y	Swap Rate	0.01	0.015
5y	Swap Rate	0.01	0.015
6y	Swap Rate	0.01	0.015
7y	Swap Rate	0.01	0.015
8y	Swap Rate	0.02	0.03
9y	Swap Rate	0.02	0.03
10y	Swap Rate	0.02	0.03
12y	Swap Rate	0.02	0.03
15y	Swap Rate	0.02	0.03
20y	Swap Rate	0.02	0.03
25y	Swap Rate	0.03	0.045
30y	Swap Rate	0.03	0.045
40y	Swap Rate	0.04	0.06
50y	Swap Rate	0.04	0.06
5y-3y	Spread	0.01	0.015
7y-3y	Spread	0.01	0.015
30y-10y	Spread	0.03	0.045
50y-10y	Spread	0.04	0.06

The calculation of the close-out costs AVA is then calculated by multiplying 50% of the prudent bid/offer spread by the valuation exposure (or sensitivity) to each individual parameter. Figure 16 and 17 shows the resulting close-out cost AVA for each of the four sets of exposures used in assessing the market price uncertainty AVA.

Figure 16.: Close Out Cost AVA where no spread trades are included in the reduced exposure

<i>Without Spread Trades</i>	P&L Volatility	Reduction in P&L volatility	Fair Value Close Out Cost	Prudent Close Out Cost	Close Out Cost AVA	Reduction in AVA relative to when unreduced valuation input used
Portfolio	EUR 11,432		EUR 9,121	EUR 45,765	EUR 36,644	
Reduced Input 1	EUR 3,405	-70.2%	EUR 9,121	EUR 16,113	EUR 6,992	-80.9%
Reduced Input 2	EUR 1,859	-83.7%	EUR 9,121	EUR 32,381	EUR 23,261	-36.5%
Reduced Input 3	EUR 1,112	-90.3%	EUR 9,121	EUR 44,750	EUR 5,629	-2.8%

Figure 17.: Close Out Cost AVA where spread trades are included in the reduced exposure

<i>With Spread Trades</i>	P&L Volatility	Reduction in P&L volatility	Fair Value Close Out Cost	Prudent Close Out Cost	Close Out Cost AVA	Reduction in AVA relative to when unreduced valuation input used
Portfolio	EUR 11,432		EUR 9,121	EUR 45,765	EUR 36,644	
Reduced Input 1	EUR 3,405	-70.2%	EUR 9,121	EUR 9,891	EUR 771	-97.9%
Reduced Input 2	EUR 1,859	-83.7%	EUR 9,121	EUR 17,988	EUR 8,867	-75.8%
Reduced Input 3	EUR 1,112	-90.3%	EUR 9,121	EUR 23,951	EUR 14,831	-59.5%

In this case the AVA would be EUR 14,831 (as Reduced Input 3 was identified as the appropriate reduced valuation input to meet the requirements of paragraph 5). Institutions will typically hold fair value adjustments for close-out costs. Those adjustments for close-out costs which relate to this portfolio would be deducted from the total to calculate the final AVA for close-out costs for the valuation exposure (this may not be greater than zero and neither may the implied prudent value of any individual instrument be greater from the institution's point of view than the fair value).

According to Paragraph 7, this final AVA will be included in the aggregation methodology described in Annex in order to calculate a total category level close-out costs AVA.

4.2 Cost- Benefit Analysis / Impact Assessment

4.2.1 Introduction

Article 10(1) of the EBA Regulation (Regulation (EU) No 1093/2010 of the European Parliament and of the Council) provides that when any draft implementing technical standards/regulatory technical standards developed by the EBA are submitted to the EU Commission for adoption, they should be accompanied by an analysis of ‘the potential related costs and benefits’. This analysis should provide an overview of the findings regarding the problem to be dealt with, the solutions proposed and the potential impact of these options.

This note outlines the analysis of the approaches proposed to calculate additional valuation adjustments (AVAs).

4.2.2 Problem definition

Issues addressed by the European Commission (EC) regarding prudent valuation

For many financial instruments, a range of alternate estimates may reasonably be acceptable for their valuation. While this range is expected to be narrow in liquid and transparent markets, it may be broad in markets that are illiquid and lack transparency. This is particularly the case for exotic products involving complex payoffs stemming from embedded non-linearities and option-type structures or products involving illiquid assets or products with volatile liquidity.

CRD3 tried to mitigate the effects that this uncertainty of valuation has on the capital of institutions (in particular on the permanence of capital) by widening the requirements regarding prudent valuation to cover all fair valued positions regardless of whether they are held in the trading book or the banking book. As a result, all institutions should estimate a prudent valuation of all their assets measured at fair value when calculating the amount of their own funds and deduct from Core Equity Tier 1 capital the amount of any additional value adjustments necessary. The intended effect of these adjustments is to set valuations at a level that achieves an appropriate degree of certainty, so that the valuation used for regulatory purposes is not higher than the true realisable value.

Issues addressed by the technical standard and objectives

In its impact assessment of the CRDIV framework, the European Commission noted that the lack of details within certain CRD provisions allow for supervisory judgement and/or choice to be made. This uncertainty leads to a fragmented and inconsistent financial supervision, impeding legal clarity and resulting in excessive administrative burden for cross-border banks.

Prudent valuation adjustments have not been applied consistently among institutions and across member states. To encourage similar practices regarding prudent valuation among firms, the Regulation 575/2013 Article 105 lays out a number of valuation adjustments that should be considered when making a prudent

valuation and requires RTS to be developed to provide further details on how the standards set out in Article 105 should be applied.

The objective of these RTS is to provide a common methodology to calculate AVAs to harmonise the approaches followed by institutions across member states regarding prudent valuation, while taking into account the diversity of business models of EU financial institutions.

4.2.3 Technical options considered

This section explains the rationale behind some of the choices that the EBA has made when designing the RTS proposals.

Proportionality

For positions for which the level of uncertainty in the valuation is low, there is a limited analytical benefit of applying prudent valuation and the impact to capital will be negligible. Smaller and less complex institutions are less likely to hold a large portion of exotic, concentrated or illiquid positions portfolios for which there is significant valuation uncertainty. For these institutions, the benefits of calculating more precise AVAs are unlikely to be proportional with the costs of using a more resource intensive method. Therefore, instead of only one method for calculating AVAs, the EBA has decided to propose two approaches:

- A simplified approach, for institutions holding an absolute value of on- and off-balance-sheet fair-valued assets and liabilities lower than EUR 15 billion. For these institutions, the AVAs should be calculated using a simple formulaic approach based on the sum of the absolute value of on- and off-balance-sheet fair-valued assets and liabilities. This approach should require very limited additional resources.
- A core approach, for larger firms holding a large amount of fair value positions, which are more likely to hold portfolios of assets for which there may be a high level of uncertainty in the valuation. This approach will necessitate conducting a more detailed analysis for the calculation of the AVAs and will be more resource intensive. In order to reduce additional incremental compliance costs, the EBA has tried to propose requirements that can be readily adapted from the systems and controls used by large institutions in the current operational context, in particular those used for the independent price verification process.

Treatment of diversification

Institutions hold diversified portfolios to reduce losses occurring due to simultaneous adverse events. Even if the objective of prudent valuation is to ensure that the valuation used for regulatory purposes is not higher than the true realisable value, it would be excessively prudent to suppose that adverse valuation estimation errors are all perfectly correlated. Not recognising diversification could lead to an excessive overestimation of the deductions to Core Tier 1, which could create disincentives that would prevent certain otherwise profitable transactions from being made.

The EBA therefore proposes allowing diversification in the core approach for the AVAs calculated regarding price uncertainty, close-out costs and model risk. For these categories, as the valuation adjustments are based on uncertainty around market price data, it would be inappropriate to assume that all of an institution's positions would simultaneously crystallise a loss at a 90% level of certainty, as this would assume that the price uncertainty is 100% correlated across asset classes. It therefore seems appropriate to assume that, across a diversified portfolio, an institution's valuation uncertainty would also be diversified.

Documentation and controls

The EBA has proposed high principles regarding the documentation, systems and controls that should support the prudent valuation process. These requirements have been made to achieve a minimum level of harmonisation of the documentation and controls practices in the EU.

For institutions that are using the core approach, the EBA proposes to introduce an on-going monitoring requirement regarding the quality of data for some AVAs. It is believed that it may be beneficial to perform tests that may indicate a lack of prudence of the calculated AVAs.

4.2.4 Impact of the proposals

Although applying prudent valuation to all fair-valued positions to calculate adjustments to Tier 1 capital is a requirement that has been in place since CRD3, the proposed methodology is new and will therefore require some adjustment for institutions. There will be two types of costs:

Direct compliance costs

Most institutions will be using the simplified approach, based on a simple formula. They should therefore require only very few additional resources to conduct this calculation. Larger institutions will have to follow the core approach, which may require additional resources. The main costs for these institutions will be related to changes in systems and processes and to hiring new staff. However the EBA expects that larger firms will already have many of the required systems and processes in place. The extent of these costs will vary among institutions and will depend mainly on how close the current methodology applied is to the methodology proposed in the RTS.

Indirect capital costs

Prudent valuation adjustments have been not applied consistently among institutions and across member states. For this reason, some large institutions may be using a method for applying prudent valuation that is very different from the core approach proposed in this RTS. Applying the core method may therefore produce a total amount of AVAs that may in some cases be different from the result obtained using the current method and necessitate a larger deduction from the current amount of Core Tier 1 held.

The EBA conducted a QIS to estimate the total impact of the requirements of the RTS. The QIS results do not take into account the level of AVAs already calculated by institutions and are therefore estimates of the overall impact rather than incremental impact of the RTS. The QIS exercise included 59 banks across 15 jurisdictions as follows:

Figure 18.: Number of institutions participating in the QIS

Number of Institutions	
UK	16
France	4
Sweden	5
Austria	4
Belgium	2
Germany	2
Spain	2
Greece	4
Croatia	3
Italy	2
Norway	4
Lithuania	3
Latvia	1
Netherlands	4
Portugal	3
TOTAL	59

The QIS results, once adjusted to take into account the amendments made to the draft RTS when feedback to the CP was considered, showed that on average the expected AVAs would be equivalent to 1.5% of the CET1 of institutions⁴, which is on average 0.07% of the value of fair-valued positions on the balance sheet. In absolute terms, this equates to EUR 227 million per institution.

The impact varies by size of institution as follows:

Figure 19.: Impact of the prudent valuation framework by size of institution

All amounts in €m	AVA €m	% of CET1	% of Fair Value Balance Sheet
Small	53	0.18%	0.10%
Medium	634	0.83%	0.10%
Large	12,743	1.57%	0.07%
Total	13,431	1.46%	0.07%

Where the following definitions are used:

⁴ This impact is based on the reported AVAs adjusted to remove the element of the proposed simplified approach in the draft RTS, which was based on the unrealised profits of fair-valued positions, to include model risk AVAs in the scope of diversification benefit, and to remove AVAs related to CV A and AFS positions to reflect the expected 'day one' impact.

- **Small banks:** those with a sum of the absolute value of fair values of assets and liabilities < EUR 15 billion
- **Medium banks:** those with a sum of the absolute value of fair values of assets and liabilities between EUR 15 billion and EUR 100 billion
- **Large banks:** those with a sum of the absolute value of fair values of assets and liabilities > EUR 100 billion

For medium-sized banks that are near the threshold for the use of the simplified approach, the QIS found the calibration of the simplified and core approaches to be broadly comparable (an average impact of 0.8% of CET1 for the core approach compared to 0.7% of CET1 for the simplified approach).

The QIS template allowed banks to provide results under the alternative calibration where AVAs targeted an 85% level of certainty. The following table and chart shows the impact of moving from 90% to 85% as a percentage of CET1 split by size of bank.

Figure 20.: Impact of changing the target level of certainty from 90% to 85%

	AVA 90%	AVA 85%	Impact
Small	2.27%	1.98%	0.29%
Medium	2.58%	2.33%	0.25%
Large	3.99%	3.12%	0.87%
TOTAL	2.95%	2.48%	0.47%

Benefits

The two methodologies proposed in this RTS will ensure that harmonised good practices regarding prudent valuation are applied across member states and that deductions to capital to take into account the uncertainty of valuation have been made effectively.

A more prescriptive AVA methodology will help to ensure firms perform their prudent valuation assessments properly and consistently. It will also allow easier comparison between institutions and enable national supervisory authorities to better understand institutions' choices regarding prudent valuation.

4.3 Views of the Banking Stakeholder Group (BSG)

No feedback has been received from the BSG.

4.4 Feedback on the public consultation and on the opinion of the BSG

The EBA publicly consulted on the draft proposal contained in this paper.

The consultation period lasted for three months and ended on 8 October 2013. 27 responses were received, of which 24 were published on the EBA website.

This paper presents a summary of the key points and other comments arising from the consultation, the analysis and discussion triggered by these comments and the actions taken to address them if deemed necessary.

In many cases several industry bodies made similar comments or the same body repeated its comments in the response to different questions. In such cases, the comments, and EBA analysis are included in the section of this paper where EBA considers them most appropriate.

Changes to the draft RTS have been incorporated as a result of the responses received during the public consultation.

Summary of key issues and the EBA's response

Scope of positions for which valuation adjustments are required

Responses to the consultation, and questions raised during the QIS exercise, highlighted that the draft RTS required the calculation of valuation adjustments for positions for which a change in their value would not impact capital resources. Examples of these types of positions include positions for which prudential filters apply, positions held under hedge accounting and exactly matching, offsetting positions.

The EBA agrees that, as a principle, valuation positions where a change in accounting valuation would not result in a change in the level of capital resources should not receive a valuation adjustment for prudent valuation purposes. The RTS has been amended to take this principle into account in both the simplified and core approaches (and also to remove such positions from the calculation of the EUR 15 billion threshold under which the simplified approach can be applied). In addition to the changes to the RTS text, a recital has been introduced to set out the principle behind the exclusion of these positions. For positions for which prudential filters apply, this means, for instance, that if 40% of the losses or gains are filtered in CET1 (during the transitional period), 60% of the value of the position is included in the calculation for the prudent valuation adjustments. If fair value gains and losses are completely neutralised, a prudent valuation adjustment is not to be applied.

Simplified approach

A large number of respondents to the consultation noted that they do not routinely store the 'unrealised profit' on each fair-valued position. This figure was necessary to calculate one element

of the simplified approach adjustment. A similar issue was identified via the submitted QIS templates where a number of participating institutions could not complete this part of the calculation.

The EBA agrees that the 'unrealised profit' is not a material element of the simplified approach and has therefore updated the RTS to remove this part of the simplified approach.

Core approach

Industry respondents supported the proposed approach to aggregation of valuation adjustments. However, it was clear from the QIS that some respondents had misinterpreted the requirement. Therefore, the EBA has clarified the language of the standards in relation to aggregation.

Furthermore, in feedback to the consultation, a number of institutions believed that the model risk AVA largely related to valuation uncertainty and as such should receive diversification benefit. The EBA agrees that, provided institutions are calculating model risk valuation adjustments in a manner that accurately reflects valuation uncertainty, the adjustments could receive diversification benefit. The draft RTS has been amended to permit diversification benefit.

Significant feedback was received against the proposed monitoring tool defined in the draft RTS, which required institutions to collect valuation parameter data for each transaction it entered over time and use it in a specified manner as a benchmark for prudent valuation. Industry noted the significant burden of the tool and the likelihood that it would only provide relevant information for positions that are actively traded (and therefore have limited valuation uncertainty). The EBA agrees that the proposed tool was too burdensome, but considers that the use of data from trades is important when assessing the prudence of valuations. The RTS has been amended to remove the monitoring tool, and more detailed requirements to collect trade data have instead been incorporated in the general systems and controls requirements of the RTS.

Finally, the draft RTS defined a prudent value based on a level of certainty of the realisable value of a position of 90%. The QIS also tested the impact of changing this level of certainty to 85%. The QIS results showed that moving from a 90% certainty level to an 85% certainty level reduced the impact on CET1 by an average of 0.47%. Given the limited impact and considering the other changes made to the draft RTS, in particular the decision to permit for more diversification benefits, the EBA has decided to retain the 90% certainty level.

Summary of responses to the consultation and the EBA’s analysis

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
General comments			
Offsets	<p>Several respondents argued in favour of a range of offsets that should be allowed in the determination of AVAs.</p> <p>For example in some cases, if Core Tier 1 capital were to be recalculated using prudent values instead of fair values, although the fair-valued asset or liability might lose value to the firm, an offsetting increase would occur elsewhere in the calculation. Examples include hedge accounting, AFS assets (while the related prudential filter exists) and tax liability/deferred tax assets calculations.</p> <p>Respondents also noted there may be cases where the sum of capital requirements and a very prudent valuation may result in an impossible value (e.g. a security worth less than zero).</p> <p>Other respondents also noted that duplication of adjustments should be avoided, for example German GAAP includes a ‘Funds for General Banking Risk’ adjustment and there are other existing national requirements for extra capital, which should not be duplicated in these rules.</p>	<p>The EBA acknowledges that there should be provisions in the RTS to avoid valuation adjustments being applied to positions where valuation changes in the accounting framework would not lead to changes in capital resources.</p> <p>This has been addressed in the final draft RTS by clarifying the range of fair-valued positions where a non-zero AVA is required to be calculated under both the simplified and core approaches. Specifically this would currently apply to positions such as those that are reported under the hedge accounting rules, or those positions subject to a prudential filter.</p> <p>With respect to cases where the sum of capital requirements and prudent valuation adjustments would lead to an impossible result, this is considered to be theoretically possible but highly unlikely in practice. Therefore, no amendment to the RTS is necessary.</p> <p>Finally, as stated in the RTS AVAs should be calculated as the excess of adjustments over any reserves already held and duplication of adjustments should therefore not be possible.</p>	Amendments to Articles 4 and 8.
Scope	Around a quarter of respondents made the point that they felt that banking book fair-valued	The EBA believes that since the requirements of Article 105 are extended to all fair-valued assets via	No change.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	positions should not be included as the RTS mandate is only for Article 105 of the CRR, which relates only to fair-valued assets and liabilities, and not to Article 34, which includes all fair-valued assets.	Article 34, the RTS requirements should also apply to banking book fair-valued assets.	
Data quality hierarchy	Two respondents argued that a data quality hierarchy should be established.	The intention of the RTS is to provide clear requirements on the range of data that should be considered when calculating AVAs. However, since the appropriateness of each data source will depend on the portfolio being valued and might change over time, it is not considered appropriate to define a static hierarchy.	No change.
LOCOM (Lower of Cost or Market)	LOCOM is used in some accounting regimes and was specifically excluded from the scope in the DP published by the EBA related to this RTS. Two respondents wanted this exclusion to be reinstated.	The scope of the RTS is positions that are held at fair value for accounting purposes. It is therefore considered to be implicit that positions held under other valuation regimes (e.g. LOCOM) are not within the scope, and this does not need to be stated in the RTS.	No change.
Other general comments	<p>A number of other general comments and concerns were received that related to level 1 CRR requirements or other issues related to the RTS but not specifically focused on its requirements, including:</p> <ul style="list-style-type: none"> - Respondents identifying a risk that prudent valuation requirements are pro-cyclical; - Respondents highlighting potential level playing field issues with non-EU jurisdictions; and - Respondents requesting a transition period for 	These comments are not relevant to the mandate of the RTS which is to set the requirements for the application of the prudent valuation requirements of Article 105. Therefore, no adjustment is necessary for the final RTS.	No change.

Comments

Summary of responses received

EBA analysis

Amendments to the proposals

the application of the RTS.

Responses to questions in Consultation Paper EBA/CP/2013/28

Question 1. Do you agree with the minimum list of alternative methods and sources of information defined above for expert based approaches? If not, what others could be included, or which points from the current list should be removed? State your reasons.

A number of respondents provided specific feedback on the requirements of Article 3 of the draft RTS:

- **Article 3.1:** Respondents argued that since the aim of prudent valuation differs from that of the IPV process, it appears unreasonable to request the use of the same data, in case this data is partially not appropriate. For instance, this could apply in cases where the IPV relies on point estimates while the prudent valuation requires a range estimate that is not available from the particular data source.
- **Articles 3.2 and 3.3:** Respondents argued that these articles should be reworded as the current wording implies that the listed items have to be considered concurrently, regardless of relevance.
- Some respondents requested greater flexibility and to take into account the proportionality principle for the selection of information sources. Moreover, the test for the adequacy of the sources used by the bank is already in practice in the context of the audit run by the independent auditors.

The intention of the draft RTS text had been to require all of the sources of information from the IPV process to be considered. However, the use of specific data would depend on its appropriateness. The RTS text has been clarified to reflect this.

Amendment to Article 3.

Respondents suggested some potential re-

Comments

Summary of responses received

EBA analysis

Amendments to the proposals

drafting of Articles:

Article 3(1) could be redrafted as follows: ‘Where institution calculate AVAs based on market data, they should take into account market data used in the independent price verification (‘IPV’) process of Article 105(8) of Regulation (EU) 575/2013, subject to the adjustments described in this article, unless institutions can explain that this is not justified.’

Article 3(2) could be redrafted as follows: ‘The market data used to determine a prudent value shall consider available and reliable data sources, including the following, where relevant:

- a) Exchange prices in a liquid market;
- b) Trades in the exact same or very similar instrument, either from the institution’s own records or, where available, trades from across the market;
- c) Tradable quotes from brokers and other market participants;
- d) Consensus service data;
- e) Indicative broker quotes; and/or
- f) Counterparty collateral valuations.’

Article 3(3) could be redrafted as follows:

‘For cases where an expert-based approach is applied for the purpose of Articles 8 to 10, alternative methods and sources of information

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p>shall be considered, including the following, where relevant:</p> <ul style="list-style-type: none"> a) The use of proxy data based on similar instruments for which sufficient data is available; b) The application of prudent shifts to valuation inputs; and/or c) The identification of natural bounds to the value of an instrument.' 		
<p>Question 2. Do you agree with the introduction of a threshold below which a simplified approach can be applied to calculate AVAs? If so, do you agree that the threshold should be defined as above? State your reasons.</p>	<p>A majority of respondents agreed with the introduction of a threshold for the use of the simplified approach.</p> <p>However, some respondents suggested allowing the option of applying the simplified approach to all institutions, or at least the option of gaining approval from competent authorities to use this approach. One respondent noted that the simplified approach should be available to all institutions that do not hold any complex or illiquid assets and liabilities and should therefore be defined as a 'standardised' approach.</p> <p>Some respondents believed that the threshold is too low or that it is overly conservative for large institutions with small FV portfolios.</p> <p>A number of respondents suggested excluding certain assets and liabilities from the threshold calculation, including matching and offsetting assets and liabilities as is done in the AVA calculation. Some respondents proposed basing</p>	<p>The EBA considers that it is important for institutions with large portfolios of fair valued positions to implement procedures to better understand the level of uncertainty of those valuations. On that basis, it is not considered appropriate to allow all institutions to apply the simplified approach. In the case that an institution using the core approach holds only simple liquid products the application of the required calculations is not considered to be overly burdensome.</p> <p>In the final RTS the EBA has amended the text so that the threshold calculation excludes exactly matching positions and positions whose valuation changes do not impact CET1, however given the lack of a consistently applied indicator of positions with negligible valuation risk it is not considered appropriate to exclude other positions from the scope of the threshold or calculations in the RTS.</p>	<p>Amendment to Article 4.</p>

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p>the threshold on balance sheet assets only, in reference to Article 34 of the CRR or on balance sheet assets and liabilities. Other proposed exclusions were:</p> <ul style="list-style-type: none"> - Positions with clearly negligible valuation risk such as Level 1 assets or those referred to in Article 8.2 i.e. zero AVA for MPU; - Hedging derivatives and Level 1 liquid bonds; - Hedged positions (e.g. secured transaction/hedging); - Positions cleared with CCPS; - Treasuries or liquid PMs and gold. <p>A large number of respondents suggested accounting for fair value hierarchy and LCR liquid assets eligibility, both for the threshold and AVA calculation. Some respondents suggested taking into account the fair value hierarchy and affecting multipliers for each level of assets (0 to Level 1, 1 to Level 2, etc.)</p> <p>Alternative threshold definitions were also proposed:</p> <ul style="list-style-type: none"> - If the sum of the absolute value of on- and off-balance-sheet fair-valued assets and liabilities exceed EUR X billion and Y% of total assets or exceed EUR Z billion the institution applies the core approach (with Z much larger than X). - If fair valued positions exceed 15bn and 25% of total assets or exceed 50bn the institution applies 		

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p>the core approach.</p> <p>- The simplified approach cannot be applied if the sum of absolute values of on- and off-balance sheet fair value positions is more than 25% of total assets or more than EUR 15 billion.</p> <p>Some respondents noted that the reference to off-balance sheet FV assets and liabilities is unclear since by definition assets and liabilities are recorded on the balance sheet and they only calculate the fair value of items where the fair value of items is recognised on-balance sheet.</p> <p>One respondent requested clarification on the way balance sheet items are treated in the EUR 15 billion threshold: based on market value or at the RWA level (especially for AFS FV).</p>		
<p>Question 3. Do you believe there are any practical issues with a parent institution being required to apply the ‘core approach’ to all fair value positions whilst a subsidiary is allowed to apply the simplified approach? State your reasons.</p>	<p>Most respondents believe that this does not cause any issues. However, a majority of respondents were in favour of allowing the use of a combination of approaches at the consolidated level – i.e. that parent institutions should be able to use the simplified approach at subsidiary level even though the threshold is breached at consolidated level. Those respondents believed that recalculating AVAs for all positions of a given subsidiary with the core approach would impose a heavy operational burden due to double-computation and would be inconsistent with other risk practices (e.g. market risk partial use).</p> <p>One respondent proposed allowing for simple aggregation of AVAs in this case, taking into</p>	<p>For the same reason of the application of the threshold, above which the core approach must be applied (the EBA considers that it is important for institutions with large portfolios of fair-valued positions to implement procedures to better understand the level of uncertainty of those valuations), it is considered appropriate for parent institutions to use the core approach if the consolidated balance sheet includes a significant volume of fair-valued positions.</p> <p>Furthermore, the EBA notes that allowing a mixed approach could permit firms to avoid detailed analysis of positions with high valuation risk by placing them in small subsidiaries with a balance sheet that is below the threshold for the core</p>	<p>Amendment to Article 4.</p>

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p>account intra-group deals. Another respondent suggested that the EBA should provide guidelines for allocating AVAs estimated at group level through both approaches to contributing subsidiaries.</p> <p>Some respondents underline that this issue is resolved if the simplified approach is made available to all institutions (see question 2).</p> <p>One respondent noted that obtaining the agreement of external auditors will be difficult.</p>	<p>approach.</p> <p>In order to mitigate this risk and to ensure more consistency in the valuation of positions within a group, thus facilitating the on-site and off-site supervisions of the valuation of fair-valued positions, the EBA considers that, where the threshold is breached on a consolidated basis, the core approach should be applied to all entities of the group included in the consolidation.</p>	
<p>Question 4. Do you agree with the proposed simplified approach? Do you think the risk sensitiveness of the approach is appropriate? Are there alternative approaches that you believe would be more appropriate? State your reasons.</p>	<p>Most respondents welcome the implementation of the proportionality principle but do not agree with the proposed simplified approach. In particular, the reference to unrealised profits was opposed for the following reasons:</p> <ul style="list-style-type: none"> - It leads to <u>inconsistency</u>: values will differ for the same position depending on when the position was taken, whether FIFO, LIFO or average cost is used, and the direction of the position; - It is <u>not a good indicator of uncertainty</u> and there is no clear link between the two concepts. - <u>Storage issues</u>: unrealised P&L is not stored in most institution's systems - <u>High cost for a low benefit</u>: it is costly to implement for a limited benefit in terms of risk measurement. - It is a <u>historical value</u> that is not risk-sensitive (unrealised profit could be locked in by risk off- 	<p>The EBA accepts that the use of the unrealised P&L in the simplified approach could be overly burdensome for smaller institutions and has therefore removed it from the final draft RTS.</p> <p>Other proposed simplified approaches were considered to be overly complicated or rely on subjective assessments of valuation risk (e.g. if the IFRS fair value hierarchy was used) and the approach in the final draft RTS therefore only refers to the value of fair-valued positions in institutions' balance sheets.</p>	<p>Amendment to Article 5.</p>

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setting trades).

- It would lead to a transfer of volatility embedded in derivatives to the capital ratio.

- Unrealised gains and losses cannot act as a proxy for two different purposes, FV variation and FV uncertainty (the RTS must be consistent with the technical advice of the EBA under Article 80).

- The term unrealised profit lacks any national and international standard definition, and harmonised understanding.

- Institutions can manipulate the net unrealised profit figure by closing off existing deals that are profitable and by entering into new deals in the same instrument.

These respondents generally suggested the removal of the 25% of unrealised gains component. Some respondents alternatively proposed lowering the percentage of unrealised net profit and increasing the percentage of the overall FV assets and liabilities. One respondent suggested lowering the percentage from 25% to 5% if the component cannot be removed, while another suggested having an interval (1% – 25%) based on an assessment of the quality of the portfolio (FVH, position size etc.)

Many respondents suggest using existing concepts, either based on accounting standards or prudential regulation. Globally, they suggested using a percentage of balance sheet figures and/or a

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	<p>differentiation based on FVH and liquidity classes.</p> <p>Some respondents propose using multipliers for institutions to which FVH applies and that for those preparing financial statements where the local GAAP does not require FVH classification, they could instead use the simple applicable balance sheet fair value with a single multiplier (for instance 0.1%).</p> <p>One respondent suggested that the AVA calculation should be based on the IFRS 13 disclosures (considering a sliding scale of % weighting based on FVH for on-balance sheet items and focusing on Level 3 instruments off balance sheet⁵).</p> <p>Another respondent proposed using portfolio sensitivity measures (delta or vega) instead of unrealised profits.</p> <p>One respondent proposed the following approach: No, or very low, AVA for Level 1 fair-valued positions. • No, or very low, AVA for derivatives in hedge relationships designated according to IAS39. • 0.05% of the sum of the absolute value of Level 2 fair-valued positions. • 0.20% of the sum of the absolute value of Level 3 fair valued positions.</p>		

⁵ One of the simplest methods would be to calculate the AVAs solely based on balance sheet fair values, but consider a sliding scale of % weighting based on the IFRS 13 fair value hierarchy level. Alternatively, if non balance sheet information was used then this could be focused on the Level 3 instruments for which the following measures are already required under IFRS 13: (i) the total gains or losses for the previous 12 months attributable to Level 3 instruments; or (ii) the amount disclosed under IFRS 13.93(h)(ii) for the effect of changing the unobservable inputs to reflect a reasonably possible alternative.

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	<p>Another proposed the following approach: notional netted value of financial instrument multiplied by 1 basis point in case of non-derivative instrument, 5 basis points in case of derivative instrument, if and only if the financial instrument is attributed to fair value Level 2 or Level 3 according to the IFRS 12 fair value management hierarchy.</p> <p>Some respondents suggested applying the simplified approach only to on-balance sheet FV assets. Many respondents suggest the exclusion of certain assets and liabilities, such as assets judged to have zero MPU AVA in the core approach, off-balance sheet assets, or positions whose FV is provided by an active market. One respondent suggested calculating the 25% of unrealised gains based on assets only (not all positions held at FV).</p> <p>One respondent proposed a transitional provision, such as setting a cap on initial unrealised gains on individual assets outside the trading book in proportion to their current valuation of 20 % at the time the ITS enters into force.</p> <p>Finally, one respondent suggested clarifying, as was done in the Q&A for the QIS, what is meant by matching and offsetting positions. Others requested clarification on how to calculate unrealised gains.</p>		
<p>Question 5. Could a differentiated treatment for some asset/liability classes be considered, for example</p>	<p>The majority of the banks recommended keeping the algorithm simple, and addressing the liquidity of positions in an indirect way via fair value hierarchy as it would pave way for convergence</p>	<p>The EBA’s focus has been on maintaining the simplicity of the simplified approach whilst ensuring a consistent outcome across jurisdictions. The option to split positions by their liquidity was explored in</p>	<p>No change.</p>

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<p>having regard to their liquidity? Please state the pros and cons of such a differentiation. How would you define the degree of liquidity of an asset/liability class (e.g. fair value hierarchy, eligibility for the LCR, other)?</p>	<p>between the accounting and regulatory requirements. One respondent suggested a liquidity ratio classification.</p> <p>Finally, one respondent suggested that the approach could benefit from using categories of liquidity already defined by IFRS or CRD, but the metric should not be made more complicated or burdensome for banks.</p>	<p>the QIS and many banks found this very difficult to implement. Even where it could be implemented the EBA notes that the IFRS fair value hierarchy does not apply to all institutions and where applied is inconsistent in its implementation. On that basis, a differentiated approach by liquidity has not been included in the final draft RTS.</p>	
<p>Question 6. Do you agree with the approach defined above to calculate an AVA where the approaches in Articles 8 to 16 are not possible for a valuation exposure? If not, what other approach could be prescribed? Explain your reasoning.</p>	<p>Most respondents stated that the fall-back approach was too penal. A small number recognised that this was intentional but all believed it was overly pro-cyclical. A common suggestion to avoid this was to allow a transition period whereby a multiple of previous AVAs would be allowed for several periods of being unable to apply the core approach before the full fall-back approach would be required.</p> <p>Most respondents also disagreed with the use of unrealised P&L within the calculation of the AVA – either because this is not available in current systems and would require heavy investment or because unrealised profit is inconsistent and unrelated to the valuation uncertainty or both.</p>	<p>The intention of the fall-back approach is that it is a penal treatment to deal with the risk posed by positions where the institution has no data available to have any view on the value. In these cases, the EBA believes it is appropriate to apply an approach that removes any unrealised profit (since this cannot be supported by evidence) and ensures a significant valuation adjustment is applied.</p> <p>It is expected that for most institutions the fall-back approach would only be necessary on a very small number of positions and on this basis requiring the unrealised P&L to be calculated should not be overly burdensome.</p>	<p>No change.</p>
<p>Question 7. Do you agree with the approaches defined above to calculate AVAs for market price uncertainty, close-out costs, and unearned credit spreads? If not, what other approach could be prescribed?</p>	<p>Responses to this question were varied. The most common five responses were each made by around a quarter of respondents:</p> <p>1. Respondents stated that the overall core approach was too complex and resource-intensive. Three respondents also stated that firms should be allowed to use the simplified approach for any size</p>	<p>The EBA considers that a robust approach to consider valuation is important for banks with significant fair-valued exposures. With respect to specific issues raised:</p> <ul style="list-style-type: none"> - The hedge effectiveness test is intended to act as a tool to ensure institutions’ approaches to net 	<p>Amendments made throughout RTS to clarify requirements.</p>

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<p>Explain your reasoning.</p>	<p>of business.</p> <p>2. Respondents stated that using the prudent side of valuation uncertainty for every point on a curve or surface will create discontinuities which should be avoided (whole realistic prudent curves/surfaces should be created).</p> <p>3. Respondents stated it should be made very clear that if exit prices are used to calculate the market price uncertainty AVA (Article 8) then no close-out costs AVA (Article 9) is required.</p> <p>4. Respondents stated that the hedge effectiveness test to determine the granularity of netting allowed on a matrix of parameters is too complex and resource-intensive.</p> <p>5. Respondents stated that the netting granularity test also required overly correlated P&L to pass and would in fact allow very little netting. Suggestions have been made to increase the 10% figure or to use monthly P&L rather than daily P&L.</p> <p>Other responses that were made by a small number of respondents included:</p> <p>1. The granularity at which the AVAs are assessed should be allowed to be netted to certain inputs rather than using direct prices for non-derivatives.</p> <p>2. An expert-based (judgemental) approach to the level of granularity should be allowed.</p> <p>3. The RTS should specifically exclude own credit and debt valuation adjustments from being</p>	<p>valuation exposures are not imprudent. The EBA has not identified any alternative approaches that can ensure consistency in this important element of the calculation process. However, the EBA agrees with replacing by ‘variance’ all occurrences of ‘volatility’ in Articles 9 and 10 of the RTS. This amendment will result in slightly relaxing the calibration of the granularity test performed under these two articles, thus avoiding unwanted side-effects in the already challenging first year implementation of the Core approach.</p> <p>- The RTS text has been clarified in a number of areas in response to a number of issues raised in feedback including the scope of the AVAs.</p>	

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p>assessed for AVAs since these are excluded from regulatory capital in any event.</p>		
<p>Question 8. Do you agree with the approaches defined in Articles 11 to 16 to calculate the various categories of AVAs? If not, what other approach could be prescribed for each AVA? Explain your reasoning.</p>	<p>Around a quarter of respondents stated that Articles 11–16 did not provide enough detail on how to determine and calculate the AVAs.</p> <p>Most respondents stated that operational risk has no place in determining a prudent valuation for instruments or portfolios of instruments.</p> <p>A third of respondents wanted to clarify that the future administrative costs AVA could be replaced with the cost of selling the whole portfolio to another market participant (several others suggested removing the future administrative costs AVA).</p> <p>A quarter of respondents made the point that the wording in the investing and funding costs AVA should be changed from the ‘contractual lifetime’ to the ‘prudent expected lifetime’ (several others suggested removing the investing and funding Costs AVA, because it refers to the funding valuation adjustment for which there is little market consensus as yet).</p> <p>A number of comments were made around the concentrated positions AVA, with several suggesting that the firm’s typical daily trading volume should not be one of the measures for determining when a concentrated position exists as the measures should be related to the market and not the firm’s individual characteristics.</p>	<p>The EBA has taken the comments received into account and clarified the requirements of the RTS for these AVAs. In the case of investing and funding costs, the language used has been updated to more closely reflect the unearned credit spreads AVA.</p>	<p>Amendments made throughout RTS to clarify requirements.</p>

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
<p>Question 9. Are there cases where the above AVAs may have a zero value that could be defined in the RTS? If yes, please specify.</p>	<p>Most respondents agreed that specific cases are not required and the general statement already included is enough.</p> <p>However, three respondents stated that all IFRS Level 1 instruments (aside from concentrated positions) should have a zero AVA and another three stated that all Level 1 and Level 2 instruments should have a zero AVA.</p> <p>Four also felt that the future administrative costs AVA should be zero where the instruments being valued are liquid and standardised.</p>	<p>The EBA considered the use of the IFRS fair value hierarchy. However, given that it is not applied by all institutions, this was not considered appropriate as the basis of determining positions with a zero AVA.</p> <p>With respect to future administrative costs the text has been reviewed to clarify when the AVA should be considered to be zero.</p>	<p>No change, other than amendments to Article 15 to clarify future administrative costs AVA calculation.</p>
<p>Question 10. Do you agree with the approach defined above for the aggregation of valuation exposure level AVAs within the market price uncertainty and close-out cost AVA categories? If not, what other approach could be prescribed? Explain your reasoning.</p>	<p>Most respondents agreed with the relatively simple approach taken in the CP to simply take a 50% haircut for the diversification benefit.</p> <p>However, four respondents argued that banks should have the flexibility to adopt their own internal approach.</p>	<p>The RTS cannot mandate a permission process for an internal approach, and as such this option could not ensure consistent outcomes of the RTS. On that basis, the EBA has not included an option for an internal approach to diversification benefit.</p> <p>The description of the aggregation approach in the RTS has been refined so that it is clearer for institutions to implement.</p>	<p>Amendments made throughout RTS to clarify requirements.</p>
<p>Question 11. Do you agree that category level AVAs described in Articles 11 to 16 within the core approach should be aggregated as a simple sum? If not, what other approach could be prescribed? Explain your reasoning.</p>	<p>Half of the respondents stated that the model risk AVA should be included within the diversification benefit currently only allowed for market price, close-out costs and CVA uncertainty. One reasoning was that unobservable parameters can be included within market price uncertainty or model risk and it is arbitrary to allow diversification for one of these and not the other.</p> <p>Two respondents argued that all AVA categories</p>	<p>The EBA has considered the feedback received and agrees that, on the basis that the model risk AVA is appropriately calculated, it should be permitted to have diversification benefit. The treatment of the investing and funding costs AVA has also been amended and this is now integrated into other AVA categories that receive diversification benefit.</p> <p>For other AVA categories where diversification benefit was not permitted in the draft RTS the EBA</p>	<p>Amendments to Paragraph 6 of Article 11 and to Articles 12 and 13.</p>

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	<p>should be included in the diversification benefit and another two argued that the concentrated positions AVA should be included.</p>	<p>continues to believe that since these do not relate to valuation uncertainty that can be either positive or negative, they should not have diversification benefit.</p>	
<p>Q.12 Do you agree with the requirement for institutions using the core approach to implement the above ongoing monitoring tool as an indicator of the adequacy of data sources of valuation inputs used to calculate the AVAs described in Articles 8 to 10?</p>	<p>The majority of respondents (17 of 25 who answered this question) did not support implementing the ongoing monitoring tool for the following reasons:</p> <p><u>1. The tool does not provide meaningful results</u></p> <p>The majority of respondents believe that it is not possible to derive meaningful results from the proposed monitoring tool, as any form of interpolation between the two AVA dates for prudent valuation would not take into consideration underlying market movements between the two AVA dates. In particular, this problem occurs for more liquid positions with less valuation uncertainty where market movements would distort results.</p> <p><u>2. Poor cost benefit relation (see also Q 13)</u></p> <p>The majority of respondents believe that implementing and maintaining the ongoing monitoring tool is complex and associated with material cost (e.g. handling the storage of data, development of new systems). As the majority of respondents see little benefit in the ongoing monitoring tool (see point 1) they do not believe that it is an appropriate tool.</p> <p><u>3. Limited applicability</u></p>	<p>The EBA has considered the feedback and agrees that the proposed monitoring tool is likely to have a cost that exceeds its benefit. Nevertheless, the requirement to adequately monitor valuation risk is important and therefore a number of ideas proposed to improve the controls set out in the draft RTS in this respect have been incorporated in the final draft RTS.</p>	<p>Deletion of Article 20.</p>

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Some respondents state that most valuation uncertainty is associated with less liquid positions for which trading activity is generally not available.

Another respondent argued that the ongoing monitoring tool could only be applied to a limited subset of the components that are used to calculate the AVAs and would only be practical for subsets of those components for which significant data is available – precisely the components expected to have the smallest individual AVA.

4. Interdependence between Article 3 and Article 20

Two respondents pointed out that under Article 3 (Sources of market data), an institution would be required to consider actual transactions anyway when determining prudent value. If for markets where actual transactions exist these are used in the consideration of prudent valuation, then there seems to be little benefit from an additional prescriptive requirement to compare transaction prices to interpolated prudent valuations.

A minority of respondents do in general support a regular 'backtesting', but not necessarily the approach in the CP.

- Three respondents only supported the ongoing monitoring tool if the core approach is not extended to each subsidiary of a parent institution using the core approach and if the parent

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	<p>institution is instead able to aggregate data calculated on the basis of the simplified approach. Otherwise the implementation costs would be excessively burdensome.</p> <ul style="list-style-type: none"> - One respondent suggested extending the monitoring tool to model risk and other AVA categories. For institutions applying the core approach, prudent values of fair-valued positions should be properly documented and back tested using actual exit prices. In case of significant back testing violations, the results should be reported to management and the calculation should be adjusted if necessary. - One respondent noted that there is need to document the whole process in a way it can be audited. <p><u>Suggestions for improving the ongoing monitoring tool</u></p> <ul style="list-style-type: none"> - Two respondents suggested reducing the scope of the monitoring tool (e.g. limit it to Level 3 instruments in accounting terms). - One respondent proposes monitoring only on portfolio basis or model category basis - One respondent asked for clarification of whether the monitoring tool should only be implemented in cases where a reduced valuation input is used or whether it should always be implemented. 		

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In general, most respondents either believed that it should be possible to cover the requirement for ongoing monitoring or that ongoing monitoring should be integrated into existing processes.

The following proposals were made:

- Some respondents felt that a robust and detailed daily P&L explain and attribution control including analysis of significant P&L generated on new transactions, restructuring and exits is sufficient to review the fair and prudent valuations.

- One respondent believed that ‘new deal review’ processes that allow institutions to compare their trading levels to where they are marked can also be used for prudent valuation purposes. According to respondents, these processes already provide a good indication of whether trading levels are consistent with books and records marks and therefore if these processes demonstrate that there is not a significant or concentrated amount of trading occurring at levels worse than the books and records marks, then by the nature of the prudential marks being equal to or more conservative than books and records marks this also holds true for prudential marks.

If not, what other approach could be prescribed? State your reasons.

- One respondent advocated portfolio FVAs and AVAs benchmarking through consensus or regulators’ surveys. They observe that Basel has undertaken a benchmarking on internal models which includes FVAs and AVAs returns for a set of

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p>portfolios. On-going comparative analysis between IPV, bid offer and AVAs can be considered.</p> <ul style="list-style-type: none"> - One respondent believed that effective AVA corroboration is provided when examining collateral management data. - Respondents noted that back testing is especially difficult for unrealised gains. Institutions should document how they have substantiated the fair value of less liquid positions, what judgement and information was used to value positions on a portfolio basis (e.g. equity, interest rate, FX, equity options, interest rate options). This would enhance the internal controls of banks and would make more sense as it requires banks to learn from their valuations - Some respondents suggest allowing institutions to design the appropriate methodology to make use of the trade data on their own. 		
<p>Question 13. Do you agree with our analysis of the impact of the proposals in this CP? If not, can you provide any evidence or data that would explain why you disagree or might further inform our analysis of the likely impacts of the proposals?</p>	<p>A significant number of respondents believed that the costs related to certain provisions would outweigh the potential benefits as they will take very material amounts of resources. In particular, the industry’s concerns related to the following elements of the RTS:</p> <ul style="list-style-type: none"> - Computation of the ratio of volatility measures - Monitoring tool - (Life-to-date) calculation of net unrealised profits 	<p>As set out above the EBA has removed the proposed monitoring tool and the uses of unrealised profits in the simplified approach. Other issues have been considered and responded to in the relevant questions above.</p> <p>In the final draft RTS the impact assessment has been updated to incorporate additional information based on the QIS process.</p>	<p>Impact assessment updated to reflect QIS results.</p>

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p>With respect to the other provisions of the RTS, the respondents did not raise any specific concerns on the cost-benefit relationship.</p> <p>Other comments made included:</p> <ul style="list-style-type: none"> - Two respondents felt that the IPV process in small and medium-sized banks as well as in large but less sophisticated banks, is far from supporting prudent valuation and would require substantial modifications and enhancements to accommodate for the requirements of the CP. - A small number of respondents suggested further dimensions of costs should be considered for the impact assessment: <ol style="list-style-type: none"> 1) Costs of ineffective bank management (The RTS does not provide clear guidelines about the calculation of the AVAs which may lead to less effective bank management.) 2) Costs of unattractive markets (AVAs for less liquid positions will make investments in developing markets less attractive and limit the innovation of products) 3) Costs resulting from the complexity the RTS adds to management reporting, bank controlling and auditing. <p>- Regarding the assessment of indirect capital</p>		

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p>costs, one bank suggests taking into account the results of the QIS, since it will provide a better estimate of the impact that the proposals may have on capital needs.</p> <ul style="list-style-type: none"> - One respondent believed that the core approach is quite complicated, data intensive and subject to a lot of potential management judgement. As an alternative, the respondent suggests an approach along the lines of the simplified approach with a bigger threshold applied in order to reduce the element of judgement. - According to two contributors, the Prudent Valuation Framework (especially the core approach) contains cyclical features that lead to a drain of further liquid resources towards capital reserves in conditions of liquidity distress. It is proposed to address problem of cyclicity by introducing countercyclical measures into the RTS. - One respondent believed that prudent valuation rules should be fine-tuned to the other regulatory initiatives (Fundamental Review of the Trading Book, Basel III Liquidity Regime) so that bank regulation in its entirety would be consistent. 		