

11th April 2024

**Re: EBA RTS Consultation Paper On The Amending RTS On Prudent Valuation –
Response from Skylight IPV Limited**

Skylight IPV is a provider of consensus IPV data and services to the global investment banking and commodity trading community.

As an independent company with extensive experience of designing, creating and running consensus services for valuations and independent price verification, Skylight IPV is in a unique position to offer informed insight and comment on the Consultation Paper on “Amending Draft Regulatory Technical Standards on prudent valuation” (“RTS”).

There is plenty to discuss in the RTS but some topics of interest to Skylight IPV are found in Article 3 and Annex 2, as reproduced below:

Article 3

1. Institutions shall use at least the same range of market data as a basis for calculating the AVAs, as they use in the independent price verification (‘IPV’) process referred to in Article 105(8) of Regulation (EU) No 575/2013, provided that the market data meet the requirements set out in this Article.

2. Institutions shall consider a full range of available and reliable market data to determine a prudent value using one or more of the following market data sources:

(a) exchange prices in a liquid market;

(b) trades between parties at arm's length 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 where the number of contributors is greater than or equal to 10 and the institution has performed a valuation back testing.

For the purpose of the first subparagraph, point (d), valuation back testing refers to the testing of the data source to confirm that the data from this source is consistent with actual market transactions.

3. Where institutions apply an expert-based approach in accordance with Articles 9(5), point (a)(ii), 10(6), point (a)(ii) and 11(4), they shall consider additional methods and sources of information, including, where relevant, the following:

(a) consensus service data not meeting the conditions in paragraph 2, point (d);

(b) indicative broker quotes;

(c) counterparty collateral valuations;

(d) the use of proxy data based on similar instruments for which sufficient data is available;

(e) the application of prudent shifts to valuation inputs;

(f) the identification of natural bounds to the value of an instrument.

Annex 2 (a) (ii)

The value of the aggregation factor 'α' shall be 0, in the following cases:

(1) where the conditions in point (i) are not met;

(2) where the APVA calculated is a market price uncertainty AVA and the conditions in point (i) are met, but an unadjusted IPV difference remains after the

completion of the independent price verification ('IPV') process in accordance with Article 105(8) of Regulation (EU) No 575/2013.

Article 3 (2) (a) exchange prices in a “liquid market”

Where a contract is regularly traded, and in appropriate size, this approach is perfectly reasonable.

However, where a contract has little (or even no) open interest then this approach needs to be carefully considered.

Using other sources of available and reliable data will almost certainly lead to a more accurate and consistent outcome.

In particular OTC quotes and trades can often transact in volumes many times larger than the contracts traded on the exchange.

The proposed approach is also problematic for contracts where there is a timing difference between the exchange close and the closing time for the OTC markets.

We regularly see significant pricing differences between prices and trades submitted at the exchange close compared to those for the OTC market economic end of day (the OTC close). These discrepancies can occur across all asset classes.

Article 3 (2) (c) tradable quotes from brokers and other market participants

Where there are tradable quotes, in reasonable size then these should be included in the range based approach.

However there can be cases where there are tradable quotes but these are well below the standard OTC transaction size and are a significant, and unrealistic, distance away from mid-market.

Reliance on these in the expert approach could produce incorrect measures of market price uncertainty, valuations and ultimately incorrect AVAs.

Article 3 (2) (d) consensus service data where the number of contributors is greater than or equal to 10 and the institution has performed a valuation back testing

If there are more than 10 contributors that are actively trading, the resulting consensus is consistent with valuation back testing and the ranges and thresholds all correspond with expectations, then this approach works well.

However the proposed threshold of 10 contributors could create less than ideal incentives for consensus pricing providers in several areas, as per the examples below.

1: There are 10 contributions but one of them is incorrectly marked - there will be a temptation to create a mechanism so that the contribution is counted, but does not affect the consensus, range and other statistics.

2: A service has 9 submitters – there will be pressure to add an additional contributor; even if they are inactive and will add no value to the process.

3: There are also markets where the number of active participants is well below 10. A consensus formed from a fewer number of active contributors but backed-up by quote and trade data will provide an accurate and reliable valuation.

If an individual submission, and the associated consensus, correlates well to quote and trade data then that is a more desirable outcome than a consensus made up of more contributors that doesn't display this behavior.

Article 3 (3) (b) indicative broker quotes

A further area of concern is that indicative broker prices are considered for inclusion within the expert-based approach.

Brokers will quote a wide range of prices and some of these will be indicative whilst others will be firm and actionable.

Indicative quotes can give useful information but cannot be consistently relied upon from a valuation perspective. These prices can sometimes be wide, speculative and with no firm interest behind them.

However, actionable quotes will have firm interest behind them and trading can happen within the range of quotes. They can give a reasonable range of exit prices and therefore be relied upon from a valuations perspective.

The role of market makers is to gather all information from quotes, trades and other market data sources and then use this market intelligence to calibrate their models and trading systems. They will execute trades and then mark their books based on these inputs.

Annex 2 (a) (ii)

The value of the aggregation factor ‘ α ’ shall be 0 ...[where] ... an unadjusted IPV difference remains after the completion of the independent price verification (‘IPV’) process

The final area we would like to comment on is the inclusion, or absence, of independent price verification adjustments when calculating the AVAs. The examples in the paper clearly show that these two approaches result in different outcomes.

To create a level playing field this issue needs to be resolved, but forcing banks to include IPV adjustments or setting the aggregation factor alpha to zero is problematic.

Effectively forcing all banks to mark to consensus (i.e. include all IPV adjustments) might seem to be a reasonable solution. It is a clean, straight forward methodology that is easy to understand.

However, the marketplace will naturally consist of a range of views. This is the outcome of different pricing inputs, models, market intelligence, trading strategies as well as existing positions and exposures.

If a bank is within a reasonable range of consensus, and other banks’ marks, then that bank’s view could well be considered to be just as valid as that of any other contributor.

Forcing a bank to re-mark to a consensus with which they (somewhat) disagree could generate questions around the valuation and IPV process, lead to the incorrect calculation of AVAs and therefore not encourage the correct engagement in what is a vital part of the regulatory framework for the valuation of OTC derivative markets.

Yours sincerely



Nigel Hyde, Executive Chairman

Responding to this consultation

The EBA invites comments on all proposals put forward in this paper and in particular on the specific questions summarised in 5.2.

Comments are most helpful if they:

- respond to the question stated;
- indicate the specific point to which a comment relates;
- contain a clear rationale;
- provide evidence to support the views expressed/ rationale proposed; and
- describe any alternative regulatory choices the EBA should consider.

Submission of responses

To submit your comments, click on the 'send your comments' button on the consultation page by 16.04.2024. Please note that comments submitted after this deadline, or submitted via other means may not be processed.

Publication of responses

Please clearly indicate in the consultation form if you wish your comments to be disclosed or to be treated as confidential. A confidential response may be requested from us in accordance with the EBA's rules on public access to documents. We may consult you if we receive such a request. Any decision we make not to disclose the response is reviewable by the EBA's Board of Appeal and the European Ombudsman.

Data protection

The protection of individuals with regard to the processing of personal data by the EBA is based on Regulation (EU) 1725/2018 of the European Parliament and of the Council of 23 October 2018. Further information on data protection can be found under the Legal notice section of the EBA website

As explained in the Background and rationale, the amendments to Article 3 intend to amend the hierarchy of data sources for the purposes of determining AVAs to reflect observations regarding the accuracy and reliability of data from the different sources. Certain data sources originally included in paragraph 2, and therefore eligible for use in the context of the range-based approaches, are moved to paragraph 3 and will only be eligible under expert-based approaches.

As regards the consensus service data referred to paragraph 2, point (d), the limit of 10 contributors is derived from observed market practice, and considers that a lower number of contributors may make the AVA estimation less reliable. Consequently, data from consensus data services with less than 10 participants would only be eligible in the context of the expert based approaches.

Question 2. Do you have any comments on the amendments to Article 3 in general, and specifically with regard to the threshold of ten contributors set out in paragraph 2, point (d)? If you consider a different threshold should be applied, please describe how to set it, and provide a rationale and evidence supporting your proposal.

Article 3 (2) (a) - exchange prices in a liquid market will form part of the range based approach.

Where there is a sufficient volume of trades, that are comparable to volumes traded in the OTC markets and no timing issues exist then this approach is appropriate.

If any the above conditions are not met then this can cause valuation issues, the incorrect calculation of AVAs and subsequent capital reductions.

The Appendix to this response contains a worked example of some of the issues, the impact that this can have on the calculation of AVAs, and the subsequent impact that this can have on the valuation risk deducted from capital.

Evidence to support the views expressed/ rationale proposed has been made available to clients of Skylight IPV and the EBA but due to contractual constraints this cannot be publically available.

The view of Skylight IPV is that exchange prices can be a powerful pricing input into the valuation process but more guidance is required to avoid the unintended, and significant, issues that this proposal could cause.

Article 3 (2) (d) consensus service data where the number of contributors is greater than or equal to 10 and the institution has performed a valuation back testing

The proposed threshold of 10 contributors appears somewhat arbitrary and creates perverse incentives for consensus pricing providers in several areas.

There are markets where the number of active participants is well below 10. A consensus formed from a fewer number of active contributors but backed-up by quote and trade data will provide a far more accurate and reliable valuation.

The Appendix to this response contains a worked example of some of the valuation issues, and the impact that this can have on the calculation of AVAs and the subsequent impact that this can have on the valuation risk deducted from capital.

Evidence to support the views expressed / rationale proposed has been made available to clients of Skylight IPV and the EBA but due to contractual constraints this cannot be publically available.

The view of Skylight IPV is that this amendment should be removed. Alternatively more guidance should be given to avoid the perverse incentives and unintended consequences that this amendment could create.

Please refer to the background and rationale and the explanation on the individual articles for information on the intentions of setting the alpha factor to zero in case of missing or insufficient fair value adjustments, in case the institution makes use of the dimensionality reduction, or in case unadjusted IPV differences remain.

As explained in the background and rationale, the fourth case where the alpha factor is set to zero is related to a concentration of UCS AVAs. This consultation paper proposes two mechanisms for deciding on the value of the alpha factor:

- Under option 1, the aggregation factor alpha used to adjust the MPU, CoC or model risk component of the UCS AVAs for aggregation should be set to zero, as soon as the UCS AVAs for a single counterparty account for 10 or more percent of the total UCS AVAs;
- Under option 2, the aggregation factor alpha would be set to zero only for adjusting the MPU, CoC and model risk components of the UCS AVAs associated to the five counterparties of the institution that attract the highest amounts of UCS AVAs.

Under Option 1, the MPU, CoC and model risk components of the UCS AVAs would not be affected by the requirement, until the 10% threshold is exceeded for at least one counterparty, i.e. the alpha factor would either be zero or 0.5 for every MPU, CoC and model risk component of the UCS AVA. Thus, there could be a cliff effect as regards the total category-level UCS AVAs depending on whether the threshold is exceeded (or no longer exceeded) over time. Option 2 CONSULTATION PAPER ON THE AMENDING RTS ON PRUDENT VALUATION 46 avoids such a cliff effect, but would subject the UCS AVAs of the counterparties attracting the highest UCS AVAs to a zero aggregation factor even if the UCS AVAs may are not truly concentrated towards those counterparties. Views from stakeholders are welcome on the two options for addressing concentrations of UCS AVAs.

Question 13. Do you have any comments with regard to the amendments introduced in the Annex? If you do not agree with the amendments, please describe how you would adjust or design the requirements to meet the policy objectives that the amendments try to achieve. When giving your answer, please provide the rationale and relevant evidence supporting your proposal.

The final area we would like to comment on is the inclusion, or absence, of independent price verification adjustments when calculating the AVAs. The examples in the RTS clearly show that these two approaches result in different outcomes.

To create a level playing field this issue needs to be resolved, but forcing banks to include IPV adjustments or setting the aggregation factor alpha to zero is problematic.

Effectively forcing all banks to mark to consensus (i.e. include all IPV adjustments) might seem to be a reasonable solution. It is a clean, straight forward methodology that is easy to understand.

However, the market place will naturally consist of a range of views. This is the outcome of different pricing inputs, models, market intelligence, trading strategies as well as existing positions and exposures.

If a bank is within a reasonable range of consensus, and other banks' marks, then that bank's view could well be considered to be just as valid as that of any other contributor.

Forcing a bank to re-mark to a consensus with which they (somewhat) disagree could generate questions around the valuation and IPV process, lead to the incorrect calculation of AVAs and therefore not encourage the correct engagement in what is a vital part of the regulatory framework for the valuation of OTC derivative markets.

The Appendix to this response contains a worked example of some of the valuation issues, and the impact that this can have on the calculation of AVAs and the subsequent impact that this can have on the valuation risk deducted from capital.

Evidence to support the views expressed/ rationale proposed has been made available to clients of Skylight IPV and the EBA but due to contractual constraints this cannot be publically available.

The view of Skylight IPV is that this amendment in the Annex should be removed.

Appendix

The following table and graph represent contributions received when running the IPV process on an underlying financial instrument:

Table 1. Submitted prices and statistics

Contributions	Price
Contribution A	80
Contribution B	69
Contribution C	63
Contribution D	72
Contribution E	62
Contribution F	78
Contribution G	62
Contribution H	79
Contribution I	76
Contribution J	59

Statistic	Price
Consensus	70
Range	21
Max price	80
Min Price	59



The calculation of AVAs and capital risk reduction would be:

Case A: The IPV difference is estimated and is recorded in fair value

- Front office price (FO) = 62
 - IPV difference (that has been estimated and is recorded in fair value) (IPV) = 8
 - Fair value adjustments (FVAs) = 3
 - Fair value (FV) = $62 - 8 - 3 = 51$
 - Prudent value (PV) = 40
- AVAs = $(1 - \alpha) * (FV - PV) = 0.5 * (51 - 40) = 5.5$
- Total valuation risk deducted from capital with respect to FO = 8 (IPV) + 3 (FVAs) + 5.5 (AVAs) = 16.5

Case B: The IPV difference is estimated, but is not recorded in fair value

- Front office price (FO) = 62
 - IPV difference (that has been estimated, but has not been recorded in fair value) (IPV) = 8
 - Fair value adjustments (FVAs) = 3
 - Fair value (FV) = $62 - 3 = 59$
 - Prudent value (PV) = 40
- AVAs = $(1 - \alpha) * (FV - PV) = 0.5 * (59 - 40) = 9.5$
- Total valuation risk deducted from capital with respect to FO = 3 (FVAs) + 9.5 (AVAs) = 12.5

If the aggregation "alpha" is reduced to zero:

- AVAs = $(1 - \alpha) * (FV - PV) = (59 - 40) = 19$
- Total valuation risk deducted from capital with respect to FO = 3 (FVAs) + 19 (AVAs) = 22

The next two tables represent trading activity in the futures and OTC markets:

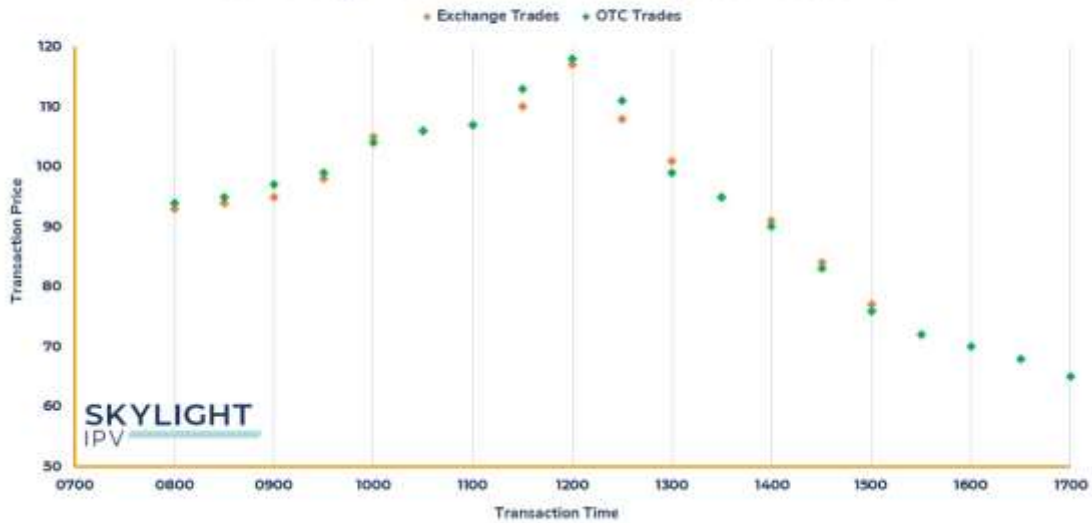
Table 2. Exchange Prices & Trades

	Average Bid	Average Offer	Bid-Offer Spread	Average Trade	Total Trade Size
8am	87	94	7	93	250
9am	90	97	7	95	150
10am	98	106	8	105	400
11am	102	110	8	107	500
Noon	112	120	8	117	400
1pm	96	104	8	101	350
2pm	87	96	9	92	250
3pm	70	79	9	78	550

Table 3. OTC Prices & Trades

	Average Bid	Average Offer	Bid-Offer Spread	Average Trade	Total Trade Size
8am	88	96	8	94	400
	90	97	7	95	400
9am	91	98	7	97	300
	95	101	6	99	400
10am	99	105	6	104	600
	102	109	7	106	400
11am	105	112	7	107	0
	108	116	8	113	400
Noon	111	120	9	118	700
	108	114	6	111	400
1pm	94	102	8	99	50
	89	98	9	95	400
2pm	85	94	9	90	400
	78	86	8	83	400
3pm	69	78	9	76	750
	67	74	7	72	400
4pm	64	72	8	70	750
	61	69	8	68	400
4.30pm	59	68	9	65	900

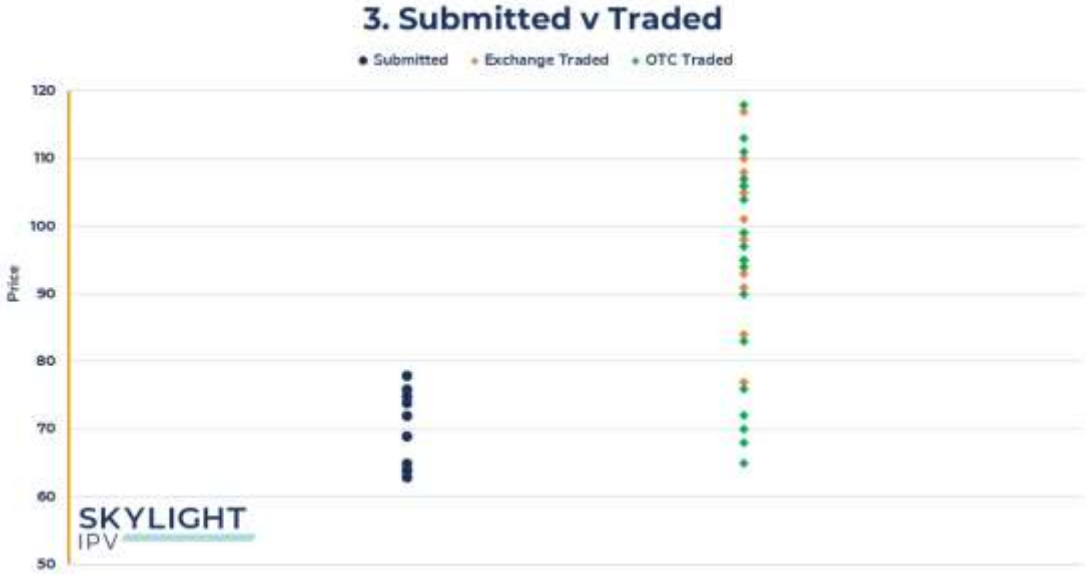
2. Average Trade Price During 1h Windows



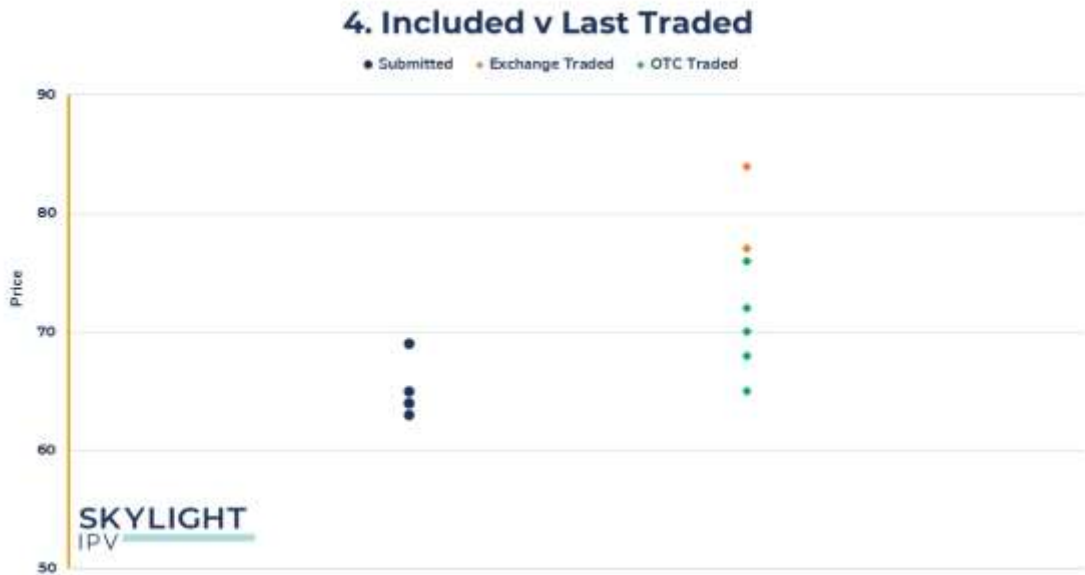
This highlights several points of interest:

- The bid offer spread implied in the futures market seems to be significantly smaller than the consensus range
- The futures market reached a high around Noon and then experienced a consistent and persistent fall during the afternoon
- The futures market closes at 3.30pm but the economic close for the OTC markets is 4.30pm

The following graph overlays exchange and OTC trade data onto the contributed prices forming the consensus (the prices forming the consensus are displayed on the left and the exchange and OTC prices on the right):



If trades that transacted 1 hour prior to the economic (OTC) close are considered then the situation looks very different (the prices forming the consensus are displayed on the left and the exchange and OTC prices on the right):



It would appear that a number of the contributions to the initial IPV process were based on the exchange closing price, and due to the persistent and consistent fall in prices throughout the afternoon, these should be excluded from the calculations.

The consensus price and range would then be calculated as follows:

Table 4. Submitted prices and statistics after cleaning

Contributions	Price
Contribution A	80
Contribution B	69
Contribution C	63
Contribution D	72
Contribution E	62
Contribution F	78
Contribution G	62
Contribution H	79
Contribution I	76
Contribution J	59

Statistic	Price
Consensus	63
Range	10
Max price	69
Min Price	59

(Highlighted cells have been removed from consensus)

Case A: The IPV difference is estimated and is recorded in fair value

- Front office price (FO) = 62
 - IPV difference (that has been estimated and is recorded in fair value) (IPV) = 1
 - Fair value adjustments (FVAs) = 3
 - Fair value (FV) = $62 - 1 - 3 = 58$
 - Prudent value (PV) = 45 (Note: due to the decreased consensus range, and therefore decreased MPU, this has increased from the previous value of 40)
- AVAs = $(1 - \alpha) * (FV - PV) = 0.5 * (58 - 45) = 6.5$
- Total valuation risk deducted from capital with respect to FO = 1 (IPV) + 3 (FVAs) + 6.5 (AVAs) = 10.5

Case B: The IPV difference is estimated, but is not recorded in fair value

- Front office price (FO) = 62
 - IPV difference (that has been estimated, but has not been recorded in fair value) (IPV) = 1
 - Fair value adjustments (FVAs) = 3
 - Fair value (FV) = $62 - 3 = 59$
 - Prudent value (PV) = 45 (Note: due to the decreased consensus range, and therefore decreased MPU, this has increased from the previous value of 40)
- AVAs = $(1 - \alpha) * (FV - PV) = 0.5 * (59 - 45) = 7$
- Total valuation risk deducted from capital with respect to FO = 3 (FVAs) + 7 (AVAs) = 10

If the aggregation "alpha" is reduced to zero:

- AVAs = $(1 - \alpha) * (FV - PV) = (59 - 45) = 14$
- Total valuation risk deducted from capital with respect to FO = 3 (FVAs) + 14 (AVAs) = 17

Conclusions:

- The first scenario where consensus is calculated from 10 contributors and backed up with exchange prices (with no consideration of trade size or timing) produces large AVAs and the highest valuation risk deducted from capital.
- This effect is then compounded if IPV adjustments are included when calculating the AVAs (or reducing the alpha to zero).
- It could be argued that consensus should be formed around the exchange close or the OTC close – both approaches have their own merits. However forming a

consensus using both sets of data will produce valuation results that no one agrees with.

- Forming a consensus of less than 10 contributors, using an expert based approach to analyse exchange data, produces a much more reliable and realistic data set.