The European Banking Authority
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Subject: Draft Regulatory Technical Standards on Technical Standards on Back-testing requirements under Article 325bf(9) and Profit and Loss attribution requirements under Article 325bg(4) of Regulation (EU) No 575/2016 (Capital Requirements Regulation 2 – CRR 2)

The International Swaps and Derivatives Association (ISDA) and the Association for Financial Markets in Europe (AFME), together "the industry" welcome this opportunity to provide comments and address specific questions related to the EBA's deliberations regarding the proposed Regulatory Technical Standards (RTSs) on Back-testing requirements and Profit and Loss attribution requirements in the European Commission's legislative proposal.

The industry reiterates that consistency is important both across European institutions and globally across regions and therefore welcome standards whilst developed for Europe should also align globally to avoid any fragmentation.

It is furthermore important that the standards are implemented simultaneously and harmoniously across jurisdictions to avoid undue technological and business burden for banks. Trading businesses of banks are fundamentally global, and possible fragmentation of trading books because of inconsistent implementation would result in reduced capacity and fragmentation in the markets.

The industry is concerned about potential inconsistency between the Basel text and EBA's proposal: industry participants do not consider that the scope of valuation adjustments in Article 1 to 4 (Actual and Hypothetical) is aligned with Basel requirements:

- the scope of valuations adjustments to include in the Hypothetical P&L as defined in in the EBA proposal is not consistent with the objective of back-testing on the Hypothetical P&L in the final Basel standards
- inclusion of IPV in the hypothetical P&L will generate inconsistency between HPL and RTPL that should not be captured in PLAT
- risk coming from Own Credit Spread in structured notes is explicitly exclude from CET1 but no reference is introduced in EBA consultation paper

In this context, a survey was conducted to discuss the adjustments that should be included in back-testing P&Ls and the results are provided in this document.

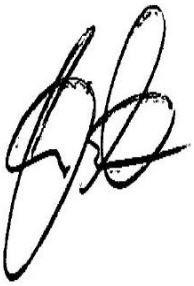
Even though it is not directly related to this consultation paper, the industry would like to highlight their concerns regarding requirements introduced in CRR2 and Basel text. The Industry is further concerned about the complexities of the use of NMRF in back-testing and in particular an incoherence between the Basel text and CRR. More specifically the industry would like to highlight that although Hypothetical (HPL) and Actual (APL) P&L both include Modellable (MRF) and Non-Modellable Risk

Factors (NMRF), some ambiguity can be found around the definition of VaR. Two other topics are discussed by the Industry : PLAT for well hedged portfolios and theta impact on Actual P&L back-testing at the trading desk level.

This response is structured in 7 sections, Valuation adjustments in the Hypothetical P&L, Independent Price Verification (IPV) , Scope of valuation adjustments which are deducted from Common Equity Tier 1, NMRF in Back-testing, Well Hedged Portfolios in PLAT Time/theta effect, and Consultation Paper questions.

We appreciate the hard work put into developing a standard which can be universally applied across institutions and respectfully asks that the recommendations provided in this response are considered and concrete actions are taken where necessary to ensure smooth implementation of the FRTB Framework.

We thank you in advance for your consideration and please do not hesitate to contact the undersigned associations with questions or if you would like to discuss our recommendations further. We remain committed to assisting policymakers in achieving the objectives of this important RTS.



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Background

The European parliament has passed the regulation amending Capital Requirements Regulation 2 (CRR2) on 20th May 2019. As directed under the new proposed regulations, on 27th June 2019, the EBA has published regulatory technical standards (RTS) on Back-testing requirements and Profit and Loss attribution requirements of CRR2 for consultation with industry stakeholders. The timeline for the submission of industry responses on the consultation period is set to 4th October 2019. The final draft RTS is required to be submitted by EBA to the European Commission by 28th March 2020.

The proposals within EBA regulatory technical standards consultation paper are intended to establish a common definition for HPL, APL for the purpose of the back-testing and HPL and RTPL for the purpose of the PLA test.

Valuation adjustments in the Hypothetical P&L

The Industry considers that the scope of valuations adjustments to include in the Hypothetical P&L as defined in Article 3(3) and 4(3) is not consistent with the objective of the back-testing on the Hypothetical P&L as well as the Basel final guidelines.

More precisely, Industry participants would like to express concern about a specific part of the first sentence "*Institutions shall include in the hypothetical changes in the portfolio's value only the adjustments that have been considered in the end-of-valuation process referred to in paragraph 1 that are market risk sensitive and are calculated on a daily basis*". This statement is problematic and not align with the following paragraphs of the final Basel text:

- [10.32] Hypothetical P&L (HPL): the daily P&L produced by revaluing the positions held at the end of the previous day using the market data at the end of the current day. […] Valuation adjustments updated daily should usually be included in the HPL. […]
- [32.27] Any other market risk-related valuation adjustments, irrespective of the frequency by which they are updated, must be included in the APL while only valuation adjustments updated daily must be included in the HPL, unless the bank has received specific agreement to exclude them from its supervisory authority. […]
- [99.6] To the extent that back-testing programmes are viewed purely as a statistical test of the integrity of the calculation of the risk measures, it is appropriate to employ a definition of daily trading outcome that allows for an uncontaminated test. […]

As defined in paragraph [99.6], back-testing on hypothetical P&L should be used as a statistical test of the integrity of the VaR measure, allowing for a more "pure" testing of the model. As a consequence, the scope of adjustments in the hypothetical P&L should be the same as the scope included in VaR. Otherwise, the test will not achieve its stated objectives.

This is also in line with paragraph [10.32] which allows exclusion under certain conditions (the sentence "should usually" clearly allows specific treatments).

Moreover, the paragraph [32.27] states that specific agreement from the supervisory authority is possible regarding the scope of valuation adjustments to include in Hypothetical P&L. As a consequence, Industry participants propose to rephrase the first sentence of Article 3(3) and 4(3) as follows:

"*Institutions shall include in the hypothetical changes in the portfolio's value only the adjustments that have been considered in the end-of-valuation process referred to in paragraph 1 that are market risk sensitive and are calculated on a daily basis provided that they are part of the VaR model, excluding:*

(a) credit valuation adjustments reflecting the current market value of the credit risk of counterparties to the institution;

(b) adjustments attributed to the institution's own credit risk that have been excluded from own funds under Article 33(1)(c)(3) of Regulation (EU) No 575/2013;

(c) additional valuation adjustments deducted from Common Equity Tier 1 capital as per Article 34 of Regulation (EU) No 575/2013.

(d) any valuation adjustments for which the exclusion was approved by the supervisory authority"

Independent Price Verification (IPV)

Industry members would like to highlight a concern on the inclusion of IPV in the Hypothetical P&L. Firstly, it is not clear whether Articles 3(1) and 4(1) apply to the whole IPV (whatever the computation frequency) or only to IPV calculated daily. IPV is a particular case of valuation adjustments performed by a unit independent of the Front Office, generally through participation to market consensus market data. IPV is then the difference between the pricing of bank's position using Front Office market data and consensus market data.

Given the complexity of the computation (pricing with Front Office data, consensus contribution, reverse engineering of the market consensus results, pricing of all positions with consensus data), IPV is a very time-consuming adjustment. This complexity explains why IPV is rarely included in the fair value on a daily basis, even for consensus performed daily.

If Articles 3(1) and 4(1) refer to IPV whether it is calculated daily or not, it would be in opposition with the Basel text: "*32.27 - […] only valuation adjustments updated daily must be included in the HPL, unless the bank has received specific agreement to exclude them from its supervisory authority*". One reason is that including Valuation Adjustments updated less frequently than daily (for example monthly) in the hypothetical P&L would have consequences for the PLA test, as it would lead to a (for example monthly) bump in hypothetical P&L which is not seen in the risk-theoretical P&L and consequently to a potential increase in the number of desks failing the PLA test. Furthermore, banks generally need to calculate 1-day VaR with a time series of consistently sourced daily closing prices, which precludes the use of consensus prices available less frequently than daily. This means that the VaR model will necessarily be aligned to the front office P&L (before IPV is added) and not the formal P&L including IPV.

Even if Articles 3(1) and 4(1) only apply to IPV calculated on a daily basis, this may still have negative consequences if the same rules are applied for the P&L attribution test:

- In general, the inclusion of a P&L adjustment in the Hypothetical P&L used for PLAT purposes makes it more likely that a desk will fail the PLAT due to operational noise in the P&L process. Requiring banks to include daily IPV but not weekly/monthly IPV creates a perverse incentive not to improve the IPV process.
- Including IPV in Hypothetical P&L effectively prevents calculating RTP&L using market data aligned with the Hypothetical P&L (as proposed in MAR 32.30-33 and article 6(2) of the draft RTS), because the market data used to calculate the front office P&L and the market data used to calculate the IPV adjustment will be different.

As a consequence, Industry members recommend that IPV should not be part of the Hypothetical P&L and suggest to either remove Article 3(1) and 4(1) or amend those to explicitly exclude IPV. If the EBA believes that the full exclusion of IPV from hypothetical P&L is not consistent with the level 1 text, then they should amend these articles to clarify that only IPV calculated on a daily basis is included in Hypothetical P&L.

Scope of valuation adjustments which are deducted from Common Equity Tier 1

Paragraph 3(b) of Articles 1, 2, 3 & 4 explicitly excludes DVA from back-testing P&Ls (CRR Article 33(1)(c)). However, there is no exclusion of the P&L coming from the variation of institution's own credit spread on liabilities (commonly called "Own Credit Risk") although it is deducted from Common Equity Tier 1 (CRR Article 33(1)(b)). This is not coherent with the final Basel text which asks to exclude "*valuation adjustments which are deducted from Common Equity Tier 1*".

Given that CET1 is not sensitive to Bank's own credit spread variations, Industry participants would like to have clarification on the inclusion or exclusion of Own Credit Risk in back-testing P&Ls as well as in VaR (consistency between VaR, Actual and Hypothetical P&L is a compulsory prerequisite to assess the integrity of the VaR measure through back-testing).

Industry participants consider that the reference to CRR Article 33(1)(c)(3) then be extended to the whole Article 33(1) which provides the adjustments that should not be included in own funds. Such exclusion would result in the exclusion of Own Credit Spread risk factor in the risk management model. It should also be noted that paragraph (3) of Article 33(1)(c) does not exist.

NMRF in Back-testing

While the Consultation Paper mostly focuses on the definition of the P&Ls to be used in the Back-testing exercise, a coherent definition of VaR is of equal importance for a statistically meaningful interpretation of the back-testing (BT) results. An accurate definition of P&L associated to an inconsistent definition of VaR would give rise to back-testing exceptions due to the difference in the definition of the input parameters.

More specifically, while that the definition of Hypothetical (HPL) and Actual (APL) P&L include Modellable (MRF) and Non-Modellable Risk Factors (NMRF)[1], there is some ambiguity on the definition of VaR.

In all its previous versions (2016[2], 2019[3]) the Basel Text presented the modellability assessment – i.e. the classification of the risk-factors that are part of the Risk Management model into either MRF or NMRF - as a step that only takes place **after**[4] back-testing and PLAT have led to the identification of the desks that are amenable to the Internal Model Approach. This implies that BT and PLAT are designed to statistically assess the quality of the Risk Management model with all the risk factors that it includes, irrespective on how they will be subsequently capitalized (i.e. ES vs SES).

The final version of CRR2[5] seems instead to be taking the opposite view and introduces an internal inconsistency in the modellability assessment process. More in detail, CRR2 prescribes (Art 325be) that the modellability assessment needs to be conducted on IMA eligible desk only (i.e. those that passed BT and PLAT) and thus is consistent with Basel text. However it then introduces the explicit requirement (Art 325bf(1.b)) that VaR used for BT purposes should use MRF only. This clearly introduces an incoherence in the process since BT should be informed about the modellability outcome before it is actually supposed to have taken place.

[1] BCBS 457 standards (MAR10.31-MAR10.33), CRR2 (Art 325bg 3.a) and the EBA Consultation Paper (§3.2.1) where no mention of the modellability requirement is made.
[2] https://www.bis.org/bcbs/publ/d352.pdf
[3] https://www.bis.org/bcbs/publ/d457.pdf
[4] In BCBS 352 the flowchart in the Executive Summary of the document clearly distinguished between the PLA and BT step where all risk factors in the model are used for the assessment (Step 2) and the subsequent step (Step3) where Risk Factor Eligibility Test (RFET) is used to identify those risk factors with an IMA Desk that can be capitalized under ES and those that need to be capitalized under SES.
In BCBS 457 exactly the same concept is expressed in words rather than with a flow chart in paragraph MAR30.4 (3).
[5] Regulation (EU) 2019/876 of the European parliament and of the council of 20 May 2019. Art 325be, Art 325bf.

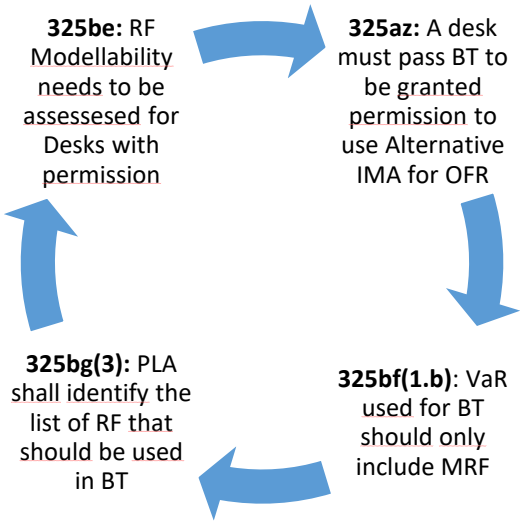


Figure1: CCR2 introduces several circular references in limiting VaR to MRF

Additionally CRR2 introduces another requirement that seems incoherent. Art 325bg(3) suggests that PLAT should provide an indication on which risk factors should be used in back-testing. However if VaR was defined as only including MRF while PLAT compares HPL and RTPL both including all risk factors it seems difficult to understand how one test should provide indications to the other test. This requirement, albeit never mentioned in Basel text, could only be coherent in case BT was also incorporating all risk factors in the model.

In conclusion the current formulation of the Level 1 text could lead to different interpretations and could impair any effort made for the accurate definition of P&L. All the Red, Amber & Green ("RAG") boundaries classifying the BT outcome can only be considered statistical significant if the definition of the model producing the forecast and the P&L providing the results are aligned. A VaR model only simulating MRF would not be comparable to results in which all risk-factors are included.

Well Hedged Portfolios in PLAT

IMA eligibility is subject to PLA Testing which is itself articulated in two tests: the degree of Spearman Correlation between HYP and RTPL time series and the Kolmogorov distributional test. While cliff effects have been smoothened on both tests with the introduction of an Amber Zone that removes the binary consequences of exiting the Green area, some additional considerations are worth making on the possibility that a desk fails the Spearman Correlation test simply because it is well hedged.

Indeed, as RTPL implementations are evolving and becoming more refined, evidence of directional desks passing the Spearman Correlation test in more instances than well hedged portfolios are starting to emerge. In particular it can be observed that desks in which main positions and their hedges individually pass PLAT (suggesting the risk model is able to adequately capture most risk drivers) can then fail the Spearman Correlation test once applied to the resulting series of hedged P&Ls.

Hedging is designed to immunize the portfolio's performance from the movements of the underlying risk-factors. A well-hedged portfolio will show comparatively small P&L both in case underlying risk-factors significantly increase or decrease. In this context the ranks of the P&Ls generated from the 250 scenarios over which the test is conducted can be the result of the residual noise after hedging, impairing correlation levels between RTPL and HPL time series.

This implicitly means that a less well-hedged portfolios could have a higher probability of being IMA eligible than ones in which risks are fully hedged.

When establishing the rules according to which desks could enter or exit the IMA perimeter as a result of the outcome of PLAT and BT, a strict automatism might not be the most appropriate choice. Some allowance should be introduced in case the RED outcome can be proved to derive from the well hedged nature of the portfolio with main positions and hedges individually passing the test.

We would hence recommend that during the IMA reporting phase specific evidence is collected on the described phenomenon and that the implications of a RED PLAT outcome are considered in case this materially affects the IMA scope.

Time/theta effect

Given the constraints of calculating 10 days shocks in the ES, most of the Industry members will not take into account the passage of time as it would require determining future cash flows and events in the next 10 days, with potentially path dependant constraints. VaR is most likely going to follow the same set up (i.e. instantaneous shocks without theta effects).

Hence an actual P&L including time effect is not going to be aligned with a definition of VaR consistent with the one used for ES, especially at the trading desk level. Therefore the industry is concerned about the potential consequences of having a different treatment of time effect for trading desks that are "theta negative".

Back-testing on the hypothetical P&L is used as a statistical test of the integrity of the VaR measure. It has been introduced by Basel to measure the performance of a trading desk's risk management model (eligibility to IMA at the trading desk level). On the other hand, the objective of conducting back-testing on the actual P&L is to demonstrate that the VaR-based capital is sufficient to cover potential market losses. Even though capital is computed at the Entity level, back-testing on the Actual P&L has also been introduced by Basel at the trading desk level to determine the eligibility of this desk to IMA: Moreover, Industry members would like to reiterate that "theta / passage of time" is not a market risk and could not be hedged. Consequently, failing the eligibility to IMA because of breaches on the Actual P&L due to theta would not improve model supervision.

Hence, Industry members would like to express their concerns regarding the condition under Article 1(2) ("*Institutions shall reflect the passage of time in the actual changes in the trading desk's portfolio value*") and the adverse consequences on business activities that this article entails. Depending on the activities and the positions of each client (market making, etc …), theta effect could be significant. For example, a large part of industry exotic trading desks is structurally theta negative (long option).

To assess the impact of the Theta inconsistency between VaR and P&L on the trading desk back-testing, we propose 2 basic examples with a trading desk long of a call on equity ATM, 2 days before expiry:

- If the call is standalone, the portfolio is by nature delta positive, theta negative and gamma positive: the instantaneous VaR will be 3 times higher than the theta (VaR = 3 x theta). The passage of time (negative theta effect) in the Actual P&L should cause breaches 8% of the time (more than 20 times on a sliding year)
  If the call is delta hedged, the portfolio is by nature delta neutral, theta negative and gamma positive: the instantaneous VaR will only have positive scenarios. Hence VaR will be positive. On the other hand, given that the Actual P&L includes the passage of time, lot of Actual P&L scenarios will be negative: breaches will be observed more than half of the time.

As expected, the more trading desk's theta is negative compared to VaR, the more the risk of breaching is high.

In order to avoid such unexpected consequences and to continue being compliant with the final Basel text, the industry ask to consider a breach related to theta permissible to continue using the IMA.

Industry participants have already indicated that some trading desks will not be eligible to IMA unless authorization to discard breaches due to theta is permitted.

Consultation Paper Questions

The Industry conducted a survey to supplement the response to Questions 1 to Questions 8 of the consultation paper. Collectively 16 firms participated in the survey, however the result of each survey question is based on the number of corresponding responses received.

The industry found the language used for questions 1 and 2 of the consultation paper related to 'sensitive to market risk' or 'market risk sensitive' too ambiguous to correctly identify appropriate adjustments. This ambiguity could lead to different interpretations on which adjustments are relevant for inclusion for back-testing or for PLAT. While considering the objective behind the questions 1 and 2, the industry structured additional questions as part of the survey to determine the list of adjustments the Industry considered appropriate from a forward looking perspective for both back-testing and PLAT. The details on the survey questions and results can be found below.

Initially, a list of valuation adjustments was identified from a prior Industry paper and was used as a baseline. These are illustrated in the below table;

List of valuation adjustments:

Adjustment	Definition
Independent Price Verification (IPV or Price Testing)	An adjustment following independent verification of market prices or model inputs leading to a restatement of the fair value
Model Uncertainty	An adjustment reflecting uncertainty due to either of the following: - estimation of a valuation parameter - choice of model e.g. local vs stochastic vol, 1- or 2- factor interest rate evolution
Model Limitation	An adjustment reflecting day-to-day use of a simpler pricing model
Concentration	An adjustment reflecting deviation of model fair value from a realizable exit cost for an outsized position.
Liquidity	An adjustment reflecting uncertainty in fair value related to lower confidence in a parameter/price due to lower market activity.
XVAs	CVA -an adjustment reflecting market value of counterparty credit risk
	DVA - an adjustment reflecting the market price of a bank's own default risk
	FVA (Fund VA) - an adjustment reflecting funding cost implications of a trade not under perfect CSA
	MVA - an adjustment reflecting expected future funding cost due to initial margin
	KVA - an adjustment reflecting he cost of regulatory capital through the life of the contract
Bid / Offer	An adjustment reflecting deviation of mid (as required for back-testing) to the more conservative of bid / offer.
Market operations	A PL component reflecting new deals, fixes, exercises and system changes.
Intraday P&L	A PL component arising from positions bought after open and sold before close on the same day
Write down / Write offs	Valuation adjustment due to the default of the issuer of the exposure
Theta	A PL component attributable to the passage of time ceteris paribus

Industry participants were asked to identify which of the adjustments they would not consider to be applicable for 2 separate categories;

- Actual Profit & Loss (used for back-testing)
- Hypothetical Profit & Loss (used for both back-testing and PLAT)

Factoring in the consensus from the survey the below table summarizes these results;

APL	*HPL*
Concentration	*Independent Price Verification (IPV)*
Liquidity	*Model Uncertainty*
XVA	*Model Limitation*
• ***CVA***	*Concentration*
• ***DVA***	*Liquidity*
• ***FuVA***	*XVA*
• ***MVA***	• *CVA*
• ***KVA***	• *DVA*
Write down / write offs	• *FuVA*
	• *MVA*
	• *KVA*
	Bid/Offer
	Market Operations
	Intraday P&L
	Write down / write offs

Day one P&L Reserve (reserve applied on Level 3 instruments on the P&L observed at the initiation of the transaction and released through the life of the transaction) is part of the Accounting P&L but is generally excluded from the End-of-day process, which is why it has not been included in the survey. This is a pure Accounting reserve. As a consequence, Day One P&L Reserve is also excluded from Actual and Hypothetical P&L.

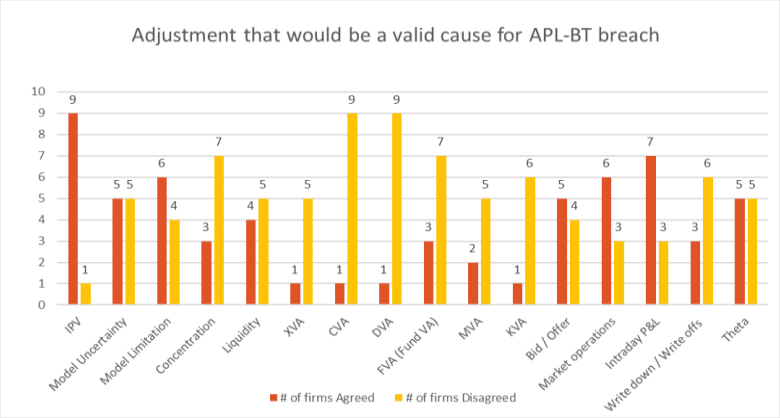
For further details including list of adjustments where no clear consensus was reached can be found in the survey results below.

<u>Survey Question 1:</u> From the list, what are the adjustments that would be in your opinion a valid cause for an Actual Profit & Loss-Back-Testing breach?

The industry considers Independent Price Verification (IPV) as a market risk sensitive adjustment which is related to quality of the EOD marking and agrees that IPV adjustments would be a valid cause for actual P&L (APL) breach for back-testing purpose, however concentration risk, liquidity and write down/ write offs would not be a valid cause for the breach.

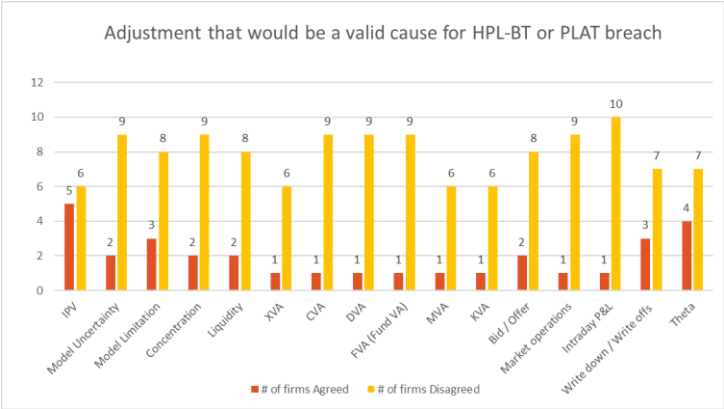
The majority of the industry respondents agree that model limitation, bid/offer, market operations and intraday P&L would be a valid cause for APL back-testing breach.

There is no clear consensus among the industry respondents whether valuation adjustments due to theta effect or model uncertainty should be applied to actual profit & loss.



<u>Survey Question 2:</u> From the list, what are the adjustments that would be in your opinion a valid cause for Hypothetical Profit & Loss-Back-Testing or PLAT breach?

The industry has a broad agreement that any of these valuation adjustments would not be a valid cause for HPL BT or PLAT breach.



The industry also highlights that consistency between HPL and VaR is essential to ensure the objective of the back-testing. As a consequence, the industry thinks that the only acceptable reason to include a daily adjustment in the HPL is that it is already included in VaR/ES (see more details in the paragraph “valuation adjustments in the HPL”).

Consultation paper questions:

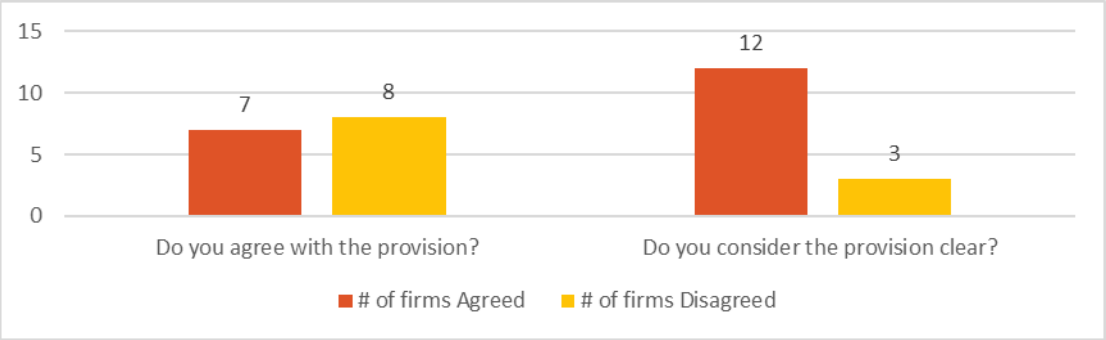
1. **Which are the adjustments that institutions include in the fair value of a financial instrument that you consider not sensitive to market risk? Please provide a list of adjustments or a list of types of adjustments?**

The Industry concluded that the requirement of being sensitive to market risk is too broad to correctly identify adjustments relevant for the back-testing of a risk model. The industry suggests using the TRIM definition[6] of "being in scope of market risk"[i] (i.e. measuring something that the VaR model is intended to capture as opposed to any element an exit price would embed). Only the adjustments in line with the TRIM definition would be deemed a valid cause for a back-testing exception.

2. **Which are the adjustments that institutions include in the fair value of a financial instrument that you consider market risk sensitive? Please provide a list of adjustments or a list of types of adjustments**

As noted in the response for question 1, the identification of adjustments which are 'market risk sensitive' is too broad and Industry propose using the TRIM definition[7] of 'being in scope of market risk'.

3. Paragraph 4 specifies that no smoothing of adjustments is permitted over the readjustment period. Do you agree with the provision? Do you consider the provision clear? [Article 1, paragraph 4]

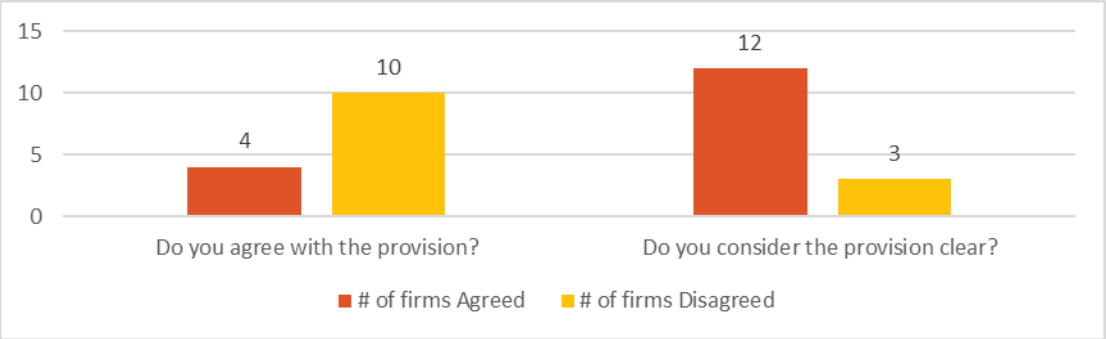


The majority of the industry participants acknowledge the provision as clear and marginally disagree with the provision specified in paragraph 4. The Industry recognises that smoothening is not perfect and can result in unpredictable outcomes as the statistical measures used in PLA tests are not always additive. However, at least this is more realistic than assuming the cumulative market risk effects over the readjustment period (week or month) is imputable to one single day. No smoothening generates a substantial operational burden on Finance (both standalone and allocated adjustments need to be computed), and does not reflect the accounting reality that P&L is additive. In addition, smoothening

[6] ECB Guide to Internal Models, Risk-type-specific chapters, July 2019. Market Risk, Section 3.4.2 para 67.
[7] ECB Guide to Internal Models, Risk-type-specific chapters, July 2019. Market Risk, Section 3.4.2 para 67.

treatment is consistent with the PRA treatment for Basel 2.5 back-testing - monthly adjustments are in Actual P&L in full on the last day of the month but can be excluded from Hypo P&L.

4. Paragraph 4 requires institutions to compute (for the purpose of the back-testing) the value of an adjustment (that is included in the changes in the portfolio's value) performing a stand-alone calculation, i.e. considering only the positions in the trading desk. Do you agree with the provision? Do you consider the provision clear? [Article 1, paragraph 4]



The industry acknowledges the provision is clear, but disagrees with the provision. The industry recognises that to calculate valuation adjustments at the desk level will create added operational/computational burden to implement the requirements. Stand-alone calculation of adjustments at trading desk level would be possible, but that approach is not deemed suitable, as it would not reflect how business units would economically unwind the risk in practice.

Valuation adjustments are typically calculated at a portfolio level with the understanding that individual adjustments may be required at a more granular level. When considering the appropriate netting level for the close out cost calculation, it is important to use a level which reflects how business units would economically unwind the risk in practice. In most cases this is considered to be at the region/business unit level rather than at the trading desk level.

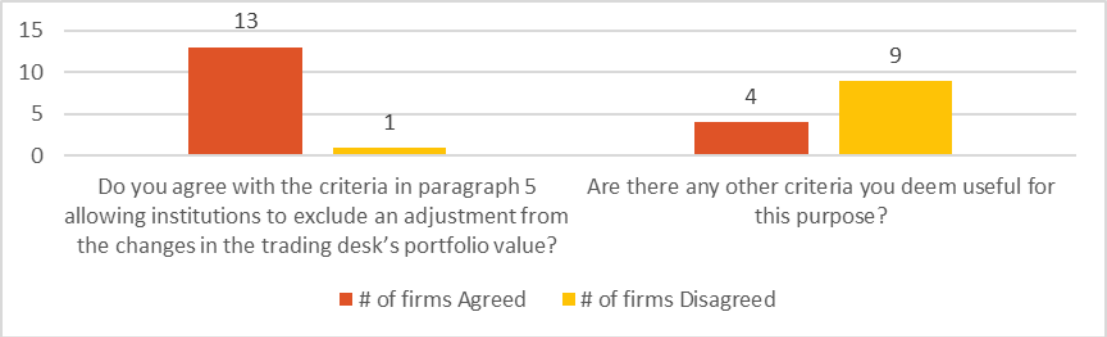
The industry is concerned that it will be overly burdensome to run the calculation at desk level of granularity in order to isolate specific subsets of positions. In practice many valuation adjustments are excluded from a trading desk's APL on the basis that they meet the criteria in paragraph 5.

To calculate adjustments for each trading desk on a standalone basis instead at the "entity" level will considerably deviate from the "fair value" which is the foundation on which P&L is based according to IFRS 13:48:

"an entity shall measure the fair value of the group of financial assets and financial liabilities consistently with how market participants would price the net risk exposure at the measurement date".

The industry suggests that the alternative would be to calculate the adjustment in-line with the risk management, and using an adequate allocation methodology, allocate the adjustments to the desk level.

5. Do you agree with the criteria in paragraph 5 allowing institutions to exclude an adjustment from the changes in the trading desk's portfolio value? Are there any other criteria you deem useful for this purpose? [Article 1, paragraph 5]

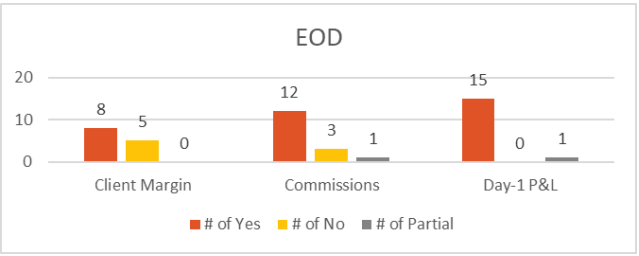


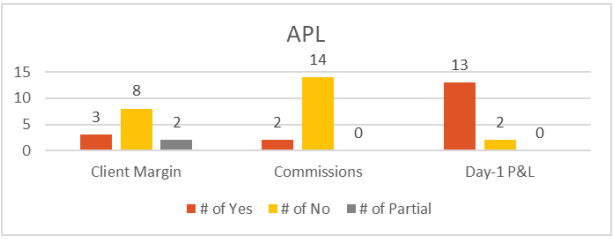
The industry participants strongly agree to the criteria sets out in paragraph 5 allowing institutions to exclude an adjustment from the changes in the trading desk's portfolio value and also suggest that the provisional criteria should only apply to market risk relevant adjustments.

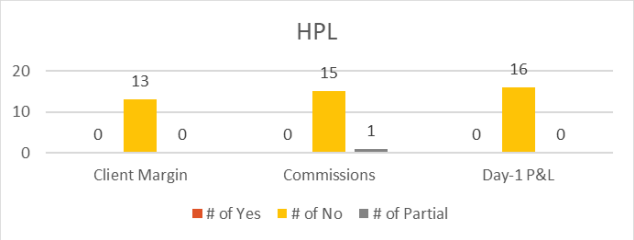
The industry of the provision in paragraph 5(a)) *"that adjustment is computed this way due to its nature"* ambiguous or not clear, and seeks more clarity in order to implement in practice. The Industry's interpretation was that adjustments that aggregate linearly would not meet this criteria (e.g. an IPV adjustment) and adjustments that reflect non-linear effects would meet this criteria (e.g. a delta bid-offer calculation on a portfolio of derivatives).

In reality, a bank may choose to take adjustments at different levels of reporting hierarchy in a way that reflects how it seeks to manage its business. This may result in adjustments being made at a higher level than the FRTB desk. Requiring banks to calculate the adjustment at a lower level only for the purpose of regulatory back-testing would be an additional process to adjust the actual P&L to include a factor not in the desks' reported P&L. This is undesirable, not just due to the additional process but also due to the lack of business use case that would render this allocation liable to error.

6. How do institutions identify client margins and day-one profits/losses in the systems (e.g. as commissions, margins)? Please specify if currently they are taken into account in the end-of-day valuation process, in the actual P&L and in the hypothetical P&L.







The industry conducted a survey requesting banks to confirm if the client margins and day-one profits/losses are taken into account in the end-of-day valuation process, in the actual P&L and in the hypothetical P&L with the subsequent results shown in the figures above.

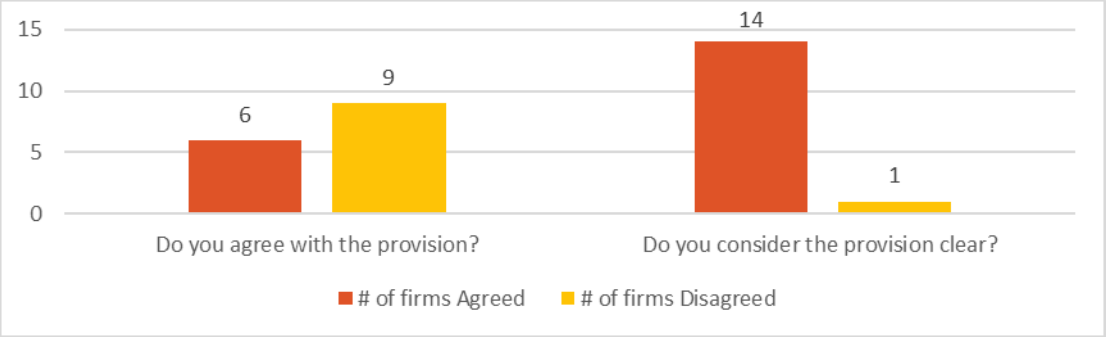
The majority of industry respondents confirm that client margins and commissions are taken into account in the end-of-day valuation process and primarily not in the actual P&L. The overwhelming number of respondents confirm Day-one profits/losses are taken into account in both the end-of-day valuation and also in the actual P&L. As a general practice, the industry does not include client margin, commissions or day-one profits/losses in their hypothetical P&L.

The industry acknowledges that client margins corresponds to the P&L generated at the initiation of the transaction. New transactions are part of the EOD Valuation process and Actual P&L but not part of the Hypothetical P&L (CRR Article 366(3)). Currently the margin generated at the initiation of the trade is determined on a declaratory basis. Consequently, day-one profits/losses reserve is computed from the declared client margin.

The industry also recognizes that risk commission is included in the actual P&L for back-testing by some banks. The industry defines the risk commission as a commission on a transaction where a bank agrees to procure an instrument for a client with a price agreed up front. The bank takes on the risk on entering the market (committing capital to fill the order) that the price is different than that agreed with the client.

However, industry members noted that the definition for day-one and client margin P&L may differ across institutions, therefore would urge EBA to retain some level of flexibility in the context of back-testing and P&L attribution. Although current firm-wide definition is subject to ongoing governance and control and often subject to scrutiny by local regulators/supervisors, as part of the Basel II back-testing process. Therefore, industry is in favour of some degree of consistency with the current capital and back-testing regime.

7. Paragraph 4 requires institutions to compute (for the purpose of the back-testing) the value of an adjustment (that is included in the changes in the portfolio's value) performing a stand-alone calculation, i.e. considering only the positions in trading desks that are calculating the own funds requirements using the internal model approach (i.e. desks meeting all conditions in article 325az(2)). Do you agree with the provision? Do you consider the provision clear? [Article 2, paragraph 4]



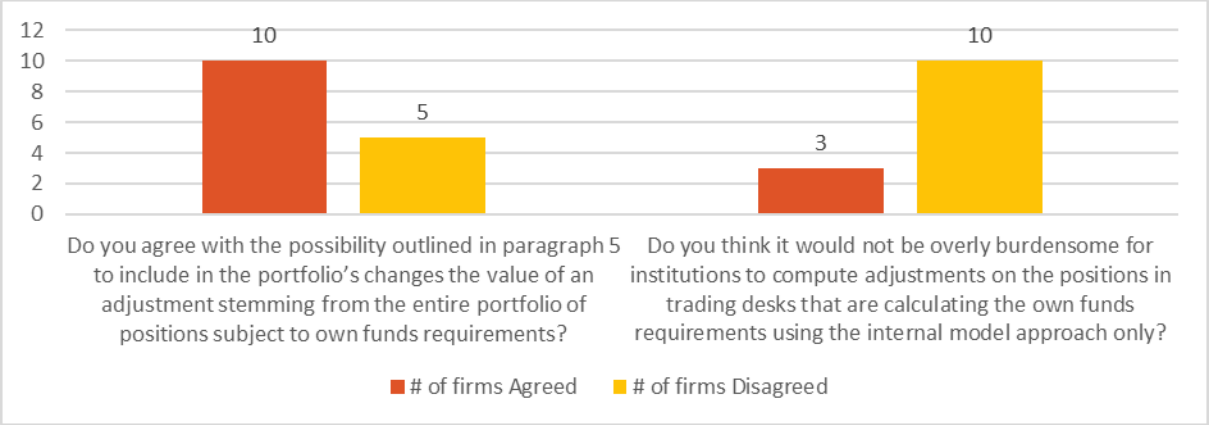
The industry considered the provision to be clear, however the majority of industry respondents disagreed with the provision and are concerned that by calculating adjustments only for the trading desks of the Internal Model Approach ('IMA') perimeter, without taking into account the netting with Standardised Approach ('SA') trading desks, will considerably deviate from the "fair value" which is the foundation on which P&L is based according to IFRS 13:48:

"An entity shall measure the fair value of the group of financial assets and financial liabilities consistently with how market participants would price the net risk exposure at the measurement date".

If the bank would need to close all positions it will net off positions across all trading desks (IMA and SA both), before going externally. For example, P&L volatility for the bank is calculated based on net positions across all trading desks. As such a calculation based on all positions should be possible, with allocation to individual desks.

The industry respondents also noted that it will be overly burdensome to run valuation adjustment calculation based on the IMA population only. The industry compute valuation adjustments (VA) not for the purpose of the back-testing, but VAs are calculated to account for factors not explicitly addressed in models to ensure fair value compliance for all relevant products across trading desks, which is not specific to IMA population. There is no economic meaning to calculate valuation adjustment only for the IMA population.

8. Do you agree with the possibility outlined in paragraph 5 to include in the portfolio's changes the value of an adjustment stemming from the entire portfolio of positions subject to own funds requirements (i.e. both positions in standard-approach desks and positions in internal model approach desks)? Or do you think it would not be overly burdensome for institutions to compute adjustments on the positions in trading desks that are calculating the own funds requirements using the internal model approach only? [Article 2, paragraph 5]



The industry agrees with the provision outlined in paragraph 5 to include in the portfolio's changes the value of an adjustment stemming from the entire portfolio of positions subject to own funds requirements (i.e. both positions in standard-approach desks and positions in internal model approach desks).

As a practical expedient, and to align the calculation of adjustments with business practice, the industry believes the approach of including all positions subject to own funds requirements for market risk is appropriate.

The provision also leads to the possibility of alignment with the actual calculations in the banks. Some banks might calculate adjustments on a portfolio basis and allocate to individual desks, other banks might calculate on a desk basis and take the diversification centrally.

The industry also notes that computing adjustments on the positions in trading desks that are calculating the own funds requirements using the internal model approach only is overly burdensome because it will deviate from the actual calculations which do not make a distinction between internal model and standardised approach. Valuation adjustment is calculated to account for factors not explicitly addressed in models to ensure fair value compliance for all relevant products across trading desks, which is not specific to IMA population. There is no economic meaning to calculate valuation adjustments only for the IMA population.

9. Do you agree with the criteria outlined in this article for the alignment of input data? Please provide some examples where an institution could use the provision set out in paragraph 2. [Article 15, paragraph 2]

Industry welcome EBA's work to allow alignment of RTPL / HPL due to the differences in the risk factor derivation due to data sources and use of different techniques to derive the risk factors "at source" of this information, as described in particular in the explanatory part of the EBA consultation paper p19. Industry observed however that the text of the article 15 (Section 2) leaves room for interpretation. To clarify, industry suggests to reword the text of the section 2 as follows:

"2. For the purpose of Article 325bg of Regulation (EU) No 575/2013, an institution may replace the value of a risk factor used in the calculation of the theoretical changes in the trading desk portfolio's value by the value of the same risk factor used in the calculation of the hypothetical changes in the trading desk portfolio's value **(or derived from input data used in the calculation of the hypothetical changes in the trading desk portfolio's value)**, where all of the following conditions are met:

(a) the risk factor used in the calculation of the hypothetical changes in the trading desk portfolio's value does not directly correspond to an input data;

(b) the risk factor has been derived from input data using any techniques of the valuation systems used for the hypothetical changes in the trading desk portfolio's value;

(c) **not all** of the techniques of the valuation systems referred to in (b) have been rebuilt in the valuation systems used in the risk measurement model to derive the value of the risk factor used in the calculation of the theoretical changes in the trading desk portfolio's value."

The rephrasing will create more transparency on eligible adjustments – e.g. in case where the RTPL is using more risk factors than a particular trading desk marking (example below) it's not clear if these can be aligned, whereas the alignment would be allowed if the data from vendors are used (as per the example given on the page 19). We also point out to the Article 16 that stipulates the requirement on the documentation and provision of the rational of any adjustment done within article 15 to ensure appropriate control framework. Example:

Risk Factors (Hypothetical): Swaps(1Y, 2Y) (Bootstrapping method used: A)

Risk Factors (Risk Theoretical): Swaps(1Y, 1.5Y, 2Y) (Bootstrapping method used: B)

For theoretical changes in the trading desk's portfolio, the value of the 1.5Y Swap rate could be derived from FO marks (Swap rate 1Y & 2Y) and the FO bootstrapping method (A).

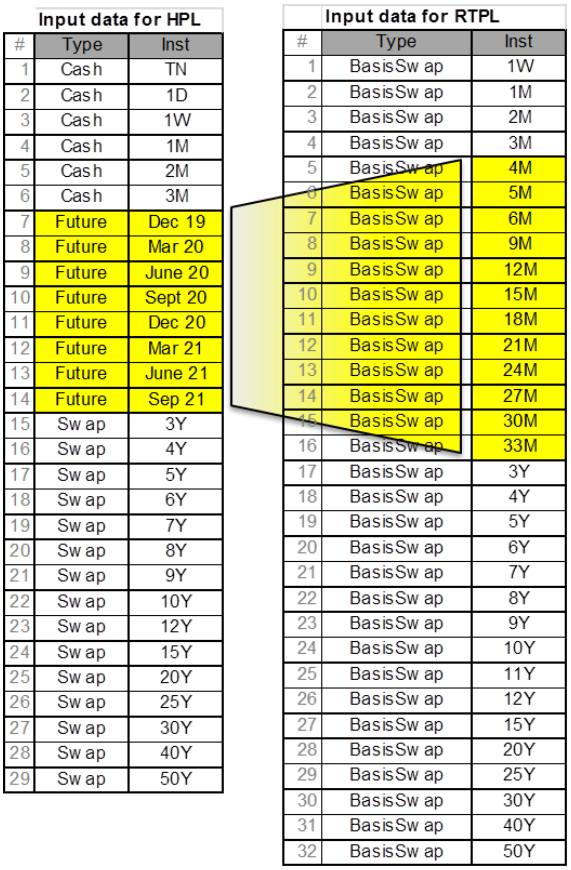
Illustration:

For the needs of end-of-day valuation, interest yield curve are usually stripped from the most liquid instruments and corresponding market prices. When instruments with fixed maturity date such as IR futures contracts are involved in the stripping for some segment of the curve, it is common practice to transform these market observations into equivalent price of "synthetic instrument" with fixed to maturity to exclude time decay effects in the calibration of risk factors and thus enable consistent shock distributions in the risk engine.

The right hand table shows a situation where an institution uses an outright USD-LIBOR 3M to perform end-of-day valuation but chooses to model this curve as a spread over the OIS curve, in order to get a more orthogonal representation of risk factors in the risk engine.

This transformation may be done by defining synthetic mono-currency basis swaps and derive related price based on the same pricing functions and input data as in the HPL. It also allows transforming data points corresponding to IR futures into equivalent data points with constant time to maturity. This transformation is not meant to reduce the granularity of the market information captured in the risk engine but transform into a tractable format, fit for the purpose of risk modelling.

Here, the 32 equivalent data points would be used as the input of reference price in the risk engine (ie reference price before shock), notwithstanding of how the institution decide to shock the data points (either with direct calibration or using a proxy).



Input data for HPL

#	Type	Inst
1	Cash	TN
2	Cash	1D
3	Cash	1W
4	Cash	1M
5	Cash	2M
6	Cash	3M
7	Future	Dec 19
8	Future	Mar 20
9	Future	June 20
10	Future	Sept 20
11	Future	Dec 20
12	Future	Mar 21
13	Future	June 21
14	Future	Sep 21
15	Swap	3Y
16	Swap	4Y
17	Swap	5Y
18	Swap	6Y
19	Swap	7Y
20	Swap	8Y
21	Swap	9Y
22	Swap	10Y
23	Swap	12Y
24	Swap	15Y
25	Swap	20Y
26	Swap	25Y
27	Swap	30Y
28	Swap	40Y
29	Swap	50Y

Input data for RTPL

#	Type	Inst
1	BasisSwap	1W
2	BasisSwap	1M
3	BasisSwap	2M
4	BasisSwap	3M
5	BasisSwap	4M
6	BasisSwap	5M
7	BasisSwap	6M
8	BasisSwap	9M
9	BasisSwap	12M
10	BasisSwap	15M
11	BasisSwap	18M
12	BasisSwap	21M
13	BasisSwap	24M
14	BasisSwap	27M
15	BasisSwap	30M
16	BasisSwap	33M
17	BasisSwap	3Y
18	BasisSwap	4Y
19	BasisSwap	5Y
20	BasisSwap	6Y
21	BasisSwap	7Y
22	BasisSwap	8Y
23	BasisSwap	9Y
24	BasisSwap	10Y
25	BasisSwap	11Y
26	BasisSwap	12Y
27	BasisSwap	15Y
28	BasisSwap	20Y
29	BasisSwap	25Y
30	BasisSwap	30Y
31	BasisSwap	40Y
32	BasisSwap	50Y

The industry considers that data alignment should be allowed in such situation as long as institutions can justify to the satisfaction of supervisory authorities that these inherent transformations of market data, performed for the purpose of risk modelling, do not distort the representation/dynamic of the PL function and provide documentation thereof as required in Article 16(2).

Of course, allowing data alignment on these transformations would not mean that the institution would be able to disregard the quality of its shock model. If for instance it is chosen in the risk model to use historical data of the 10Y data point (#24) to calibrate the shocks for the longer segment of the curve (data points #25 to #32), then these proxies should inevitably be captured in the PLA test, that will assess the materiality of the approximation.