The European Banking Authority
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Subject: Industry's views on the Consultation Paper on draft RTS on assessment methodology under which competent authorities verify an institution's compliance with the internal model approach as per Article 325az(8) of the regulation (EU) No 575/2013 (Capital Requirement Regulation 2 – CRR2)[1]

ISDA and AFME (the Industry) welcome the opportunity to comment on the European Banking Authority's (EBA) consultation paper on the draft Regulatory Technical Standards (RTS) for the assessment methodology under which competent authorities verify an institution's compliance with the requirements to use an Internal Model Approach (IMA) for market risk as per Article 325az(8) of CCR2.

According to the Capital Requirements regulation (CRR2) Article 325az(8)(b), the EBA's mandate relates to the assessment methodology under which competent authorities verify an institution's compliance with the requirements set out in Article 325bh, 325bi, 325bn, 325bo and 325bp. While the draft guidelines generally support bank's implementation processes and methodologies - and we agree with EBA's objective to harmonise supervisory practices with regards to model assessment methodologies - in our view some of the recommendations are too detailed and result in unnecessarily rigid rules that do not allow for sufficient supervisory discretion. In a few key areas the industry believes that the expectations and requirements as drafted go beyond what is expected of firms under the CRR2 text.

In this regard, it is important that the rules reflect the diversity of EU regulated banks' business models, their regional footprints and governance structures, as well as the proportionality principles. To avoid extending the objectives of this RTS beyond the mandate, the proposed methodology should allow supervisors to use discretion particularly when assessing the adequacy of bank specific governance structures.

One of the key areas where the industry believes that the draft guidelines in the RTS go beyond the CRR2 mandate and is not reasonable as a requirement is the additional requirement for back-testing expected shortfall (ES). Implementing a direct back-test of the ES is not specified in BCBS standards, nor in the CRR2. In particular, we do not believe that back-testing the ES should be introduced as an additional requirement. Complying with the EU FRTB standards already constitutes a significant challenge and introducing this additional test would pose significant operational burden for firms. This additional requirement 'gold plates' Article 325bj(3)(b) and might impact the viability of the internal model approach for some banks. We also believe that this generates level-playing field issues, as it is not expected that
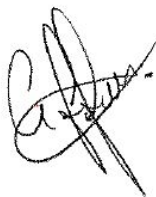
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[1] <u>Consultation paper on draft RTS on assessment methodology</u>

banks from other jurisdictions will be subject to such requirements. Thus, the industry strongly advocates the EBA to withdraw the mandatory ES back-testing requirement from the RTS.

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.

Yours sincerely,

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2   Chapter 2: Assessment of Qualitative Requirements

2.1   Role of Management body and its ability to delegate

Related to articles 6, 9, 10, 11, 14 and 16: Although the definition of the Senior Management is clarified in this new draft RTS by EBA, conversely to the requirements set in the initial draft RTS EBA/RTS/2016/07, it is now expected that most of the decisions to be taken as part of the internal governance are directly made by the Management Body without explicitly enabling delegations, either to Senior Managers or to designated committees. Even if the Management Body is ultimately accountable of the banks risk supervision, the industry believes that, for the sake of efficiency, the operational responsibilities could be delegated to relevant committees as long as their mandates are clearly defined and approved in compliance with the banks' governance.

Answer/Recommendation(s)

The industry recommends retaining the wording of articles 17 to 23 of the initial draft RTS to assess the adequacy of the internal committee structure by replacing "the Management Body" by "the Management Body or the committee designated by it" in the articles 6, 9, 10, 11, 14 and 16.

2.2   Question 1
Do you agree with the provisions included in this chapter? Did you face challenges in complying with the governance chapter of the old RTS? If so, in which respect? Please elaborate.

Answer/Recommendation(s)

Related to article 20: The industry recommends the requirements of Article 20(a) to be adjusted to avoid any overly burdensome efforts, as building an exhaustive inventory of all the pricing models used by the bank could be a significant challenge We suggest a review of the scope of this inventory to only include the internal-risk measurement model pricing functions that are different from the pricing functions used in the end-of-day valuation provided that the P&L Attribution Test shows high materiality impacts.
Hence, the Industry proposes to adjust the wording of Article 20 as follows:

(a) verify that the institution has regularly updated inventories, including:
(i) the difference between pricing functions or methods used in the internal-risk measurement model and the pricing functions or methods used to calculate the end-of-day value of the portfolio unless the institution demonstrates to the competent authorities that differences in pricing functions does not have a material impact on the results of the P&L attribution requirements as assessed in the requirement of paragraph (d);
Paragraphs (a)(iii) and (a)(iv) should then be adapted to refer to paragraph (a)(i). The industry would like to also remove paragraphs (a)(v) to (a)(vii) as the statements are unclear.

2.3 Assessment of the adequacy of the set-up of the trading desk

Question 2

What are your views in relation to the assessment methods relating to the requirements on the set-up of trading desks(see Article 7)? How do you plan to substantiate your choice of using internal models, in particular in the context of the requirement included in 325az(2), according to which the choice of not including a desk in the internal model shall not be motivated on the basis that the standardised approach requirements are lower compared to the internal model ones? Please elaborate.

Answer/Recommendation(s)

With respect to article 7, paragraph (1)(f)(b): Trading desks are defined in agreement with their business mandate. As a result, cases of multiple desks managing similar positions should be rare. However, the occasional occurrence of two desks managing similar positions must be supported by a strong rationale and in some cases may justify a different approach in calculating own funds requirements. Hence, though in principle we agree with the EBA, we believe that supervisors should be granted the supervisory power to decide on the relevance of using different approaches for desks managing similar positions.

For example, there may be cases of desks managing their positions using similar hedging instruments (in agreement with their mandate). It should be clarified that using similar hedging instruments does not in itself mean that desks have similar positions or business objectives.

Foreign exchange and commodities in the banking book do not form actual desks and should be considered separately. Though their positions may be similar to those of desks in the IMA perimeter, banks should be given the choice to capitalise those exposures using the standardised approach.

The interest rates internal risk transfer (IR-IRT) portfolios may contain positions that are similar to those of desks within the IMA perimeter. We believe that IR-IRT portfolios should be granted an exception as their exposure is expected to be roughly flat. It would not justify the additional burden of having those portfolios under the IMA perimeter.

More generally, for sets of portfolios or desks which bear no material risks, the industry believes that an exception to the proposed rule should be granted.

2.4 Assessment of the adequacy of the scope and completeness of the internal validation

"Article 12, Paragraph 1 (d):
1. *When assessing the adequacy of the scope of the validation referred to in Article 325bj of Regulation (EU) No 575/2013, the competent authority shall verify that that scope is such that it:*

d. comprises an assessment of the potential effect that alternative higher and lower correlations would produce on the expected shortfall measures;"

According to article 12 paragraph (1)(d), the competent authority shall assess "the potential effect that alternative higher and lower correlations would produce on the expected shortfall measures". The ES risk measure is defined at article 325bb paragraph 1 and include a single correlation, the supervisory correlation factor across broad categories of risk set at 50%.

We believe that it is not the intention of the competent authorities to assess the effect of changes of a prescribed supervisory factor. Hence, we assume that the intention is to assess the effect of alternative correlations in the calculation of the partial expected shortfalls in CRR article 325bc. The industry would like to understand:

- How would the assessment be made? Should alternate correlations between all pairs of risk factors be used?
- How will it help assessing an institution's compliance with the internal model approach?

Either way, the industry sees no benefit of such an assessment and suggest that the requirement of article 12 paragraph (1)(d) be deleted.

Answer/Recommendation(s)

The industry would propose the deletion of the requirements of Article 12, paragraph 1(d).

2.5   Assessment of adequacy of trading limits

"Article 14, Paragraph 1(c)):
1. When assessing the adequacy of trading limits referred to in Article 103(2), point (b)(ii), Article 104b(2), points (c) and (f), and Article 325bi(1), point (b), of Regulation (EU) No 575/2013, the competent authority shall verify that all of the following apply:

c. the institution has a further breakdown in the VaR limits, proportional to its trading strategies, including limits at the individual trader level;"

With respect to article 14, paragraph (1)(c): The understating of the industry is that a desk is the most granular unit at which business lines are defined (as confirmed in the draft EBA ITS on FRTB Reporting where the back-testing Template information is based on the granularity of a trading desk). If for front office management purposes, VaR limits may be defined at a sub-level, those limits are not official limits and should not be mandatory for regulatory purposes.

Furthermore, VaR limits at "trader" level are not meaningful since, generally, more than one trader is responsible for the management of a given activity. Finally, it is important to note such individual/granular limits do not seem to be a specific requirement of the CRR.

> **Answer/Recommendation(s)**
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> The industry suggests deleting the requirements of Article 14, paragraph 1(c).

2.6 Assessment of adequacy of the stress testing programme and reverse stress testing scenarios

With respect to article 17, paragraph (1)(c): The industry understands that ad-hoc scenarios in particular should be produced at least annually, accompanied with the results from performing reverse stress tests in accordance with Article 18;

With respect to article 18, paragraph (1)(c) and paragraph (2)(b): The industry understands that reverse stress tests and ad-hoc scenarios include several specific burdensome criteria to assess (climate risk, one-way markets, new products, pegged foreign exchange exposures, digital options, event risks for equities, correlation risk, gap risk, proxies, etc…).

The above proposals go beyond the existing European regulation on stress tests and even the Basel FRTB standard does not include such constraints. All these requests are additional constraints which were not anticipated by the industry. They are related to internal stress tests and have no direct link with the FRTB internal model.
Therefore, in the FRTB context, it is preferable to focus our efforts on the metrics used in RWA (ES, Stressed Expected Shortfall (SES), Default Risk Charge (DRC)) which are already challenging in terms of implementation.

In the particular case of reverse stress testing (and to a lesser extent on ad hoc stress tests), there is no straight-forward approach exists to perform this exercise. Hence, being too prescriptive on the way those scenarios are designed could be challenging to implement as well as potentially unrelated to the activities of the bank (e.g. digital options).

> **Answer/Recommendation(s)**
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> The industry would suggest the deletion of the requirements of Article 17, paragraph (1)(c) and Article 18, paragraph (1)(c) & (2)(b) or align with CRR2 Article 325bi (1)(g) regarding stress testing.

Question 3

What are your views in relation to the requirement for credit institutions to specifically consider environmental risk as part of their stress-testing programme under the internal model approach? Do you agree that the assessment of that aspect should only apply from 2025? If not, by when EU credit institutions could be ready to be subject to this assessment? Please elaborate.

Answer/Recommendation(s)

The Industry agrees on the fact that environmental risks should be carefully considered by banks as they could, for instance, deteriorate credit quality. However, there is no evidence on the fact that environmental risks (either transition or climate risks) could impact markets significantly in the short liquidity horizons usually seen in bank's stress testing programme for traded market risk.

There is also no consensus on the way these risks should be captured in market stress tests, therefore the Industry suggests removing any reference to environmental risk at this stage.

The industry is working on producing a conceptual framework for assessing climate risk within the trading book for the purposes of scenario analysis. This will be documented through the publication of a white paper due in early July 2023.

2.7   Question 4

What is the status of credit institutions in relation to capturing environmental risks in their stress test for market risk under the internal model approach? Please elaborate.

Answer/Recommendation(s)

As mentioned in the answer to question 3, the Industry is actively studying the integration of environmental risks in market risk. However, no consensus has been reached so far as banks continue to assess environmental risks within the trading business.

Further, as part of a paper that ISDA published during October 2022 on the challenges of Climate Risk Scenario Analysis for the Trading book[2], a survey was run to assess banks capabilities in this regard. Overall, banks qualified their climate risk scenario analysis capabilities as 'basic' or 'evolving'.

As noted in the response to Question 3, ISDA is in the process of producing a conceptual framework for assessing climate risk in the trading book for the purposes of scenario analysis which will be published during July 2023. To help inform this paper we run another very comprehensive survey, and this still maintains that banks capabilities are either 'basic' or 'evolving'.

2.8   Question 5

What is the status of credit institutions in relation to investigating whether environmental risk affects risk factor volatilities and/or the default risk? Are there credit institutions considering environmental (physical) risks as a form of event risk in their internal risk-measurement model? Please elaborate.

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[2] https://www.isda.org/a/e55gE/Climate-Risk-Scenario-Analysis-for-the-Trading-Book.pdf

Answer/Recommendation(s)

In addition to the response to our answer to question 4, some participants have studied the impact of environmental crisis / natural disaster on markets within a short-term trading horizon. It appears that the impact was minimal over a short-term horizon (short term horizons usually used to calibrate shocks for trading book stress tests), although clearly this is very much dependent on individual bank's trading book composition and material exposure to vulnerable sectors, regions, or counterparties.

2.9   Question 6

What are your views on the provisions included in Article 21(a)? In particular, do you think that monitoring APL_MRF, and HPL_MRF is relevant for identifying potential deficiencies in the model? Please elaborate.

Answer/Recommendation(s)

Due to the weaknesses of the APL_MRF and HPL_MRF (as has been highlighted in the answer to question 7), the Industry does not see any advantage emerging from the use those metrics to identify deficiencies in the model.

2.10 Assessment of compliance in relation to additional back-testing programmes

With respect to article 21, paragraph (a): The industry understands the rational of having a consistent back-test of the IMA perimeter used for own funds requirements. It should be based on the sub-IMA perimeter of desks that pass the desk-level back-tests (BT) and the P&L attribution test (PLAT) and for modellable risk factors (MRF) only. This means that:
- VaR should be calculated for the desks capitalised with the internal model method and for modellable risk factors only.
- Hypothetical P&L (HPL) and actual P&L (APL) should relate to changes of value resulting in moves of modellable risk factors only (non-modellable risk factors being kept constant)

However, the proposed approach of scaling the HPL or APL with the ratio of risk-theoretical P&L (RTPL) for modellable risk factors over the RTPL for all risk factors, would not lead to any sensible outcome. Indeed, there is no element of proportionality between the RTPL of MRF and the RTPL of NMRF. There could be cases where MRF and NMRF have opposite changes in values, leading to a close to zero denominator.

Question 7

Do you think that the scaling proposed in APL_MRF and HPL_MRF in Article 21(a) could lead to frequent numerical issues (e.g., due to a denominator, i.e., RTPL, that is close to zero)? Please elaborate.

Answer/Recommendation(s)

The industry believes that the proposed approach of using the ratio of RTPL_MRF and RTPL to scale APL and HPL, respectively, to assess whether the outliers are due to NMRF is not conceptually sound. In fact, it assumes that APL (HPL) in relation to APL_MRF (HPL_MRF) behaves in the same way as RTPL to RTPL_MRF which cannot be expected.

As a consequence, the metric defined in article 21 may lead to various false positive or negative results when trying to detect outliers due to non-modellable risk factors.

Hence, we believe that this proposal would give unusable results and the MRF back-testing, as proposed and recommend that this should be removed.

2.11 Question 8

What could be alternative definitions of APL_MRF and HPL_MRF in Article 21(a) that could provide an estimate of the contribution of modellable risk factors? Please elaborate.

Answer/Recommendation(s)

The EBA proposal requires significant additional IT developments, which would not lead to sensible results. Together with other costly additional requirements that the EBA would like to impose on IMA banks (ex. ES back-testing), it questions the sustainability of the internal model approach and might generate level-playing field issues, as banks from other jurisdictions might not be subject to such expectations.

Thus, the industry would suggest the **deletion of this article 21 paragraph (a)**. Instead, the industry would advocate that the EBA provides flexibility to banks to choose their own additional internal model validation tests. They could, for instance, **opt for one of the two approaches** described thereafter to align the scope of VaR and P&L for a consistent back-testing. Such additional analysis may serve for the determination of the root cause of a regulatory back-testing overshooting: is it due to NMRF or could it be the result of a genuine internal model deficiency? There is no easy way to perform a consistent back-testing and each proposed approach have their pros and cons, but they still remain much preferable than the one of article 21(a).

   (a) Option 1: To calculate an additional VaR that also includes non-modellable risk factors. We note that the UK authorities (PRA) has proposed to allow the use of all risk factors within VaR for trading desk eligibility for IMA back-testing.[3]

   - Pros:
     i. This back-tests a metric that can be used for risk management purposes.
     ii. For some banks, the VaR inclusive of all risk factors is not overly burdensome.

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[3] cp1622app4.pdf (bankofengland.co.uk) – Article 325bf paragraph 1(b)

- Cons:
    i. For some banks computing a specific VaR, with the only objective to perform an additional back-testing, will be significantly costly in terms of IT (specific developments, CPU cost) and human resources (production and analysis of the new VaR figures).
    ii. Use of time series with limited historical market data

(b) Option 2: To adjust HPL and APL by subtracting the P&L coming from NMRF.
    The P&L from NMRF can be proxied as the difference between RTPL and RTPL_MRF (risk-theoretical changes in the institution's portfolio's value considering only changes to modellable risk factors). Hence, the back-testing can be performed on HPL_MRF and APL_MRF where HPL_MRF = HPL + RTPL_MRF − RTPL and APL_MRF = APL + RTPL_MRF − RTPL

- Pros:
    i. This option is not overly burdensome to implement for some banks.
    ii. It does not rely on NMRF data and risk calibration.

- Cons:
    i. HPL_MRF and APL_MRF are proxies which may cast a doubt on the additional back-testing outcome, for instance if the risk pricers are simplified vs FO pricers
    ii. A direct estimation of HPL_MRF and APL_MRF would be extremely difficult for some banks to implement because there is no full alignment between the risk factors used by FO in the APL and HPL and the model factors used in IMA. Even proxy estimates as proposed may be quite cumbersome since getting RTPL_MRF may be quite of a challenge.

2.12 Question 9

What are your views in relation to the assessment method to verify that the internal validation process includes a direct back-testing of the expected shortfall, as per Article 21(b)? Do you expect this requirement to put significant burden on institutions? Which of the methods available in the literature do you expect credit institutions to use to back-test their expected shortfall? Please elaborate.

Answer/Recommendation(s)

The industry believes that direct back-testing of ES would create a significant additional operational burden for participating institutions with no straightforward benefit beyond what is already provided by VaR back-testing using one day returns. In fact, IMCC is not back-testable in its fully aggregated form, as it is an aggregation of distinct metrics calculated on multiple liquidity horizons and asset classes. Even if the diversified ES with a 10-day liquidity horizon was considered in isolation, one would require a corresponding buy & hold P&L on a 10-day horizon which would be challenging from a calculation and operational point of view . We also note that this is not required for the current capital calculation requirements for 10-day VaR calculations.

Attempting to back-test one day returns instead also suffers from severe issues: At the present time, none of the methodologies available in scientific literature provide a robust way to directly back-test ES without significant assumptions on the P&L distribution, and all available methods still require a VaR back-test. Given that, any choice made would be inevitably challenged by both the internal model validation function as well as firms' regulation authority as Article 21(b) states that the competent authority shall verify what drives the choice of the applied direct ES back-testing methodology as well as to analyze if the methodology is conceptually sound. It would also require extensive research to identify an approach that is most suitable on an individual bank basis.

Given the obstacles presented above, it is unclear what the benefit is of a direct back-test of the ES over more conventional tools such as VaR back-testing or full-distribution back-testing using quantile-quantile plots. Accurate computation of distribution quantiles ensures an accurate ES, and the tools available to back-test distribution quantiles are much more plentiful and accepted.

3 Chapter 3: Assessment of the Internal Risk-Measurement Model used to compute the expected shortfall measure and the stress scenario risk measure

3.1 Assessment of the Internal Risk Measurement Model's risk factor setup and properties

3.1.1 Assessment of the Internal Risk Measurement Model's risk factor setup

3.1.1.1 Assessment of the internal risk-measurement model's coverage of the risk

With respect to **article 23, paragraph (4):** The computation of the hypothetical P&L keeping unchanged the factors that are not included in the risk measurement model may prove very difficult as the definition of risk factors may differ significantly. It would entail having additional resources to calculate a parallel P&L for the sole purpose of assessing whether an internal model captures all material factors while, to a large extent, the identification of material factors missing in the model is already performed through the P&L attribution test. The industry suggests that this requirement should be dropped.

Answer/Recommendation(s)

The industry would suggest the deletion of the requirements of Article 23, paragraph 4.

3.1.1.2 Article 23 to Article 31

First, it should be highlighted that article 325bh is to be considered, following our interpretation, for all trading desks in IMA already successfully passing P&L attribution requirements.

The industry would like to highlight a major concern relating to Articles 23 to 31 (mainly related to the interpretation of EU CRR Article 325bh). The current consultation paper requires much more information (including inventories of risk factors and mapping with associated market parameters at the most refined level of granularity with no associated materiality criteria) compared to the EU CRR Article 325bh. Such an approach comes in contradiction with CRR2, as Article 325bh(1)(a) clearly mentions the central role played by P&L attribution requirements regarding validation of the covered perimeter and granularity of risk factors. Alongside, the significant operational burden it presents for the firms. The EBA consultation paper seems to ignore these considerations and advocates for an exhaustive list of risk factors to be analysed.

The industry would like to highlight that the requirements in Articles 23 to 31 would pose a significant challenge and we recommend amending the articles to introduce materiality constraints in light of P&L attribution requirements for each of the articles, thus only considering capitalized risk factors. As a proposal, we could recommend adding the following words (in red) which target only capitalized risk factors for extended inventory analyses, taking the example of article 25 for equity risk factors (but applied for all relevant articles mentioning 325bh):

"When assessing the institution's compliance with the requirements set out in Article 325bh(1)(e) of Regulation No 575/2013 in relation to the modelling of equity risk, the competent authority shall provide an inventory of capitalized risk factors as below"

Answer/Recommendation(s)

The industry would recommend amending the articles by only considering capitalised risk factors for IMA trading desks already successfully passing P&L attribution requirements.

Question 10

What are your views in relation to the requirement included in this Article (i.e., Article 23) on sufficient risk coverage? Do you agree that institutions should monitor the impact of the exclusion of some risk factors from the internal model? Please elaborate.

Answer/Recommendation(s)

Following Article 325bh(1)(a), validating the perimeter of risk factors should be strongly related to the results of P&L attribution tests which already constitutes a significant challenge. The consultation paper seems to ignore this fundamental axis, advocating in favor of an exhaustive list of risk factors. Our proposal is to adjust this article following the spirit of the CRR by conditioning on PLAT materiality and not monitoring non-material risk factors from a PLAT perspective.

Question 11

Do you agree with the provisions included in Article 24 and the relevant assessment techniques to verify that interest rate risk is properly captured? Do you think there are additional aspects that should be covered and/or assessed? Please elaborate.

Answer/Recommendation(s)

In addition to the overall recommendation in section 3.1.1.2, the industry would like to highlight that Article 24 suggests providing a full inventory of sensitivities at market parameter level for general interest rates with all related risk factors which represents a strong operational burden. This approach gold-plates the wording of the CRR2 (Article 325bh(1)(c)) which mentions, using a principle-based approach, that all sensitive positions should be mapped to a relevant set of risk factors. Besides, point (c) of article 24 does not include any materiality constrain, potentially implying that all bases, material or not, should be captured by the model. We suggest introducing the materiality constrain in this article.

Question 12

Do you agree with the provisions included in Article 25 and the relevant assessment techniques to verify that equity risk is properly captured? Do you think there are additional aspects that should be covered and/or assessed? Please elaborate.

Answer/Recommendation(s)

In addition to the overall recommendation in section 3.1.1.2, the industry would like to highlight that Article 25 suggests providing a full inventory of sensitivities at market parameter level for equity positions with all related risk factors which represents a strong operational burden. This approach gold-plates the wording of the CRR2 (Article 325bh(1)(e)) which mentions, using a principle-based approach, the strong link between the materiality constrain (significant positions + materiality) and sophistication of the modelling approach. This logic is not retained in article 25 which opts in favor of an inventory approach disconnected from materiality constrains. We suggest introducing the materiality constrain in this article.

Question 13

Do you agree with the provisions included in Article 26 and the relevant assessment techniques to verify that credit spread risk is properly captured? Do you think there are additional aspects that should be covered and/or assessed? Please elaborate.

Answer/Recommendation(s)

In addition to the overall recommendation in section 3.1.1.2, the industry would like to highlight that No specific sub-articles were developed in Article 325bh(1) for credit spread risk factors thus this article should be linked to general sub-article Article 325bh(1)(a) and should be strongly related to any impact on P&L attribution requirements. Instead, the same inventory logic is retained and is decorrelated from the logic developed in CRR2.

Question 14

Do you agree with the provisions included in Article 27 and the relevant assessment techniques to verify that foreign-exchange risk is properly captured? Do you think there are additional aspects that should be covered and/or assessed? Please elaborate.

Answer/Recommendation(s)

In addition to the overall recommendation in section 3.1.1.2, the industry would like to highlight that Article 27 suggests providing a full inventory of sensitivities at market parameter level for foreign-exchange positions and is decorrelated from P&L attribution requirements. Besides, the specific risk of unpegging events is added with no connection to Article 325bh(1)(d). Unpegging events are usually not market driven and should not be included in the market risk framework.

Question 15

Do you agree with the provisions included in Article 28 and the relevant assessment techniques to verify that commodity risk is properly captured? Do you think there are additional aspects that should be covered and/or assessed? Please elaborate.

Answer/Recommendation(s)

The industry would like to highlight the recommendation in section 3.1.1.2.

Question 16

What are your views on assessment techniques laid down in Article 29 and 30? Do you see alternative or additional techniques that could be introduced to assess whether the modelling of curves and surfaces is accurate? Please elaborate.

Answer/Recommendation(s)

The industry would like to highlight the recommendation in section 3.1.1.2.

Question 17

Do you agree with the provisions included in Article 31 relating to the inclusion of implied correlation risk factors? Please elaborate.

Answer/Recommendation(s)
In addition to the overall recommendation in section 3.1.1.2, the industry would like to highlight that If the implied correlation parameters do not impact the P&L attribution requirements, then the materiality constrain should prevent from forcing the institution to model this risk factor.

3.2 Assessment of the calculation of the expected shortfall risk measures and the stress scenario risk measure

3.2.1 Assessment of aspects that are relevant both for the calculation of the expected shortfall risk measures and the stress scenario risk measure

3.2.1.1 Question 32

Do you agree with the assessment techniques relating to non-linearities? Please elaborate.

Answer/Recommendation(s)
The Industry would like to highlight that the ability for the model to capture non-linearities is already measured in the P&L attribution test. We believe that in most of the cases, using first order sensitivities is sufficient. Consequently, we suggest removing any reference to "second-order terms of Taylor series approximations" in Article 40. The use of second-order sensitivities could be significantly burdensome as it would require the calculation of those sensitivities even if they are not material.

4   Chapter 4: Assessment of the Internal Default Risk model used to compute the additional own funds requirement for Default risk

Question on ad-hoc text relating to constant position assumption

4.1   Question 47

How institutions are going to implement the constant position assumption? Are there cases where the model set-up does not allow to easily capture the risk deriving from maturity mismatches, and if so, how institutions in those cases monitor such a risk? Please elaborate.

Answer/Recommendation(s)

The industry feels that competent authorities will expect banks to have implemented the constant position assumption as a constant level of risk assumption much like under Basel 2.5 IRC. Then the authority should expect that the uncaptured maturity mismatch risk is monitored by integrating an additional specific criterion related to the liquidity of instruments.

This approach is motivated by the fact that integrating all maturity mismatches within the core calculation of the DRC IMA would lead to significant economic inconsistency and even in a largely biased representation of the true underlying risk of default. Indeed, it is known that the liquidity issues in stressed conditions are much likely to happen on exotic credit or exotic equity positions than on stocks or listed equity derivatives that are highly liquid even in stressed market conditions. And yet with the "buy and hold until maturity" option, such mismatches between listed derivatives and stocks would be likely to generate the largest DRC impacts even though recent default of equities have demonstrated to have zero impact on an index future vs stock trading strategy (as the component where set to zero by the index provider with no liquidity impact).

Moreover, the "buy and hold until maturity" option could lead to very strong inconsistencies within the SA as the consideration of maturities is highly different (floor to 3 months). We also note that such positions would not generate any spot risk within the ES as the liquidity horizon is set to 10 days for large capitalization spot risk factors. Finally, even though those mismatches on most liquid positions are not a significant source of risk, some banks internal studies have shown that it could make the DRC IMA figures volatile due to the cyclicity of hedges rolling leading to difficult to explain variations of capital.

Then institutions are of opinion that the most consistent interpretation of the text is that the constant position assumption should be understood as a constant level of risk assumption and that the uncaptured maturity mismatch risk should be monitored through process that would take into account the liquidity of positions/instruments much like under the ES requirements.

Question relating to ad-hoc text relating to dependency on economic cycle

4.2   Question 48

Do you agree that the requirement in Article 325bp(2) CRR should be read as applicable to LGD only? How it could be argued that a IRB-LGD is already reflecting the economic cycle, and it already dependent on the systematic risk factors? Please elaborate.

Answer/Recommendation(s)

The statement in Article 325bp(2) could be interpreted in our view as: both PD and LGD can reflect the economic cycle. Whether or not PD should reflect the economic cycle could be left for the financial institutions to decide. In the current implementation of the IMA DRC model, if the economy is in a downturn, i.e., when systematic risk factors are lower, issuers are more likely to default since their ability to pay, which depends positively on the systematic risk factors, would be lower and more likely

to fall below the default threshold. Additionally, in case of default, the LGD distribution (whose unconditional average is the IRB-LGD) depends negatively on the systematic risk factors, which implies that lower systematic risk factors would lead to greater losses under default.

4.3   Question 49

How institutions, in their on-going implementation of model, plan to meet the requirement in Article 325bp(2) CRR? Please elaborate.

Answer/Recommendation(s)

The current IMA DRC model, with its 2 stochastic processes for ability to pay process and LGD process, already reflects the requirements in its current state.

Question relating to ad-hoc text relating to margin of conservatism

4.4   Question 50

What is your favorite option among options A, B, C as presented in Article 48(2)(k)(iii)? What are the challenges that an institution would face in implementing option A? and option B? Please elaborate.

Answer/Recommendation(s)

The preferred option for the industry is option C. It is the preferred option with the potential additional requirement of conducting a sensitivity analysis similar to that required under the 'fallback' PD methodology, where institutions are to conduct a sensitivity analysis and scenario analysis to assess the qualitative and quantitative reasonableness of the 'fallback' PD approach, when neither external sources nor an IRB-like internal methodology are available for producing PD estimates.

The methodology used to establish a margin of conservatism (MoC) for internally derived PD could be very different from the PD MoC coming from the institution's external sources, if that MoC is available at all (some external sources could provide simply a PD estimate with no expected range of estimation errors). This could make both options A and B hard to implement.

In the absence of an expected range of estimation errors, the institution could derive a crude estimation error from the externally sourced ladder of LGD by obligor grade (for example, by assuming that the LGD error at each ladder rung could be within the LGD average with the rung above and the rung below). Therefore, option C is preferred with the above mentioned potential additional requirement.