

31<sup>st</sup> January , 2014

Wayne Byres  
Secretary General  
Basel Committee on Banking Supervision  
Bank for International Settlements  
Centralbahnplatz 2, CH-4002 Basel, SWITZERLAND

**Re: Consolidated Response to the Second Consultative Document on the Fundamental Review of the Trading Book (FRTB)**

Dear Mr. Byres:

The undersigned Associations appreciate the opportunity to comment on the Basel Committee on Banking Supervision (“BCBS”) Second Consultative Document *Fundamental Review of the Trading Book* dated October 2013 (“Fundamental Review” or “FRTB”), and value the constructive dialogue with the Trading Book Group (TBG). We reiterate our support to the general objective of strengthening the capital framework for the trading book and we view the FRTB as a great opportunity to do this. In this respect, we believe that this should be done with deliberate speed so that all issues raised are considered and addressed.

It is in this spirit that we requested in our attached January 8, 2014 letter (Attachment 1) that the current timeline of the FRTB be reexamined to allow for an iterative process of policy-making combined with QIS exercises and resulting calibration and recalibration, as well as to allow firms sufficient time to implement the necessary changes in systems and processes. Indeed, the fundamental changes being proposed, particularly to the standardized approach (SA) and the inclusion of liquidity horizon component to the internal models approach (IMA), represent a significant departure from current industry practices, and hence needs significant work for firms to comply.

In this letter, please allow us to summarize the main points from our previous submissions and interaction, the details of which are in the attached letters dated January 3, 2014 (Attachment 2) and January 19, 2014 (Attachment 3) and the December 2013 list of questions (Attachment 4) regarding securitization which we have tabled informally for discussion. From a technical perspective, the proposed SA and the liquidity horizon component of the IMA pose the most concern to us and our members, followed by the proposed treatment of credit and model-independent approval process. In the following sections, we highlight our main comments on each of them in turn, as well as our other concerns regarding the trading book/banking book boundary, disclosures, floors, treatment of securitizations and CVA.

We hope that you will consider our comments and proposed alternatives, and the feasibility of the QIS timetable as currently envisioned. We believe that given an appropriate level of consideration and time to develop our proposals could be proven effective in achieving the objectives of the FRTB. As such, and if

significant revisions in the proposed methodologies were to be undertaken, the industry would greatly appreciate 1) to be informed as soon as possible since significant changes may affect the banks' ability to participate in the QIS, and 2) the opportunity to comment on such revised proposals.

### **Standardized approach**

The industry has serious concerns about the discounted cash flow framework being proposed for the SA. The need to source cash flows from trading systems, the build of a large number of interest rate curves and a large number of implied-OAS models, as proposed in the FRTB second consultation, would make the implementation of the standardized framework difficult, time-consuming and costly as well as less controlled and prone to model and operational risks. We have proposed recasting the SA in terms of the existing risk factor sensitivities, which are currently calculated by banks' pricing models. The risk factor sensitivities are more readily available, are tightly controlled and their utilization would significantly reduce the cost and time of implementation. Their use will also preserve the key elements of offsetting, diversification and aggregation that were specified by the TBG. We elaborated on this issue in the attached January 3 letter.

### **Capturing market liquidity**

We support TBG's objectives of factoring in market liquidity and appreciate TBG's effort to balance simplicity, risk sensitivity and comparability when designing the approach. We believe the TBG's objectives would be achieved more effectively if a number of remaining issues were addressed. These include the modeling challenges posed by the use of longer, varying horizons and overlapping returns, the imprecise mapping to risk factor category, the lack of clarity on the mechanism to update the horizons for more appropriate weightings, etc. We elaborated on these issues, as well as on our proposed alternatives, in the attached January 19 letter.

### **Treatment of credit**

We appreciate that migration risk will now be captured in stressed expected shortfall (ES) and removed from incremental default risk (IDR). This removes a potential double count and simplifies the default risk measure. It allows firms to account for overlap in IDR of risk which is already captured in the ES price risk model. However, there are remaining issues to address particularly on the need to clarify the definition of scope and the meaning of an n-factor model; the proposed sovereign PD floor and the use of correlation based on equity prices for sovereigns, quasi-sovereigns and municipal bonds, and which is inconsistent with AIRB for all exposure classes; and the mandatory inclusion of equity positions in IDR.

We provided some proposed language on definition of scope in our January 19 letter. In terms of the proposed sovereign PD floor, we understand that the BCBS is undertaking a comprehensive review of the prudential treatment of sovereign risk. The trading book treatment should be included in this review and not addressed separately.

With regards to the proposal to move correlation trading portfolios (CTPs) to the revised standard method, we believe it is too early to conclude that a model-based framework is not feasible for CTPs and disagree with the conclusion that the use of the SA will "narrow variability".

### **Model-independent approval process**

While we do not fundamentally object to having a model-independent assessment tool, we have concerns about the proposed approach, particularly the possible use of the Basel leverage ratio exposure measure. The proposed approach provides very little information on market risk and as such is an inappropriate tool

to evaluate the robustness of a bank's internal model to measure market risk at a desk level. We propose a more risk sensitive alternative, which is outlined in the attached January 19 letter.

### **Trading book/Banking book boundary**

We understand and support the goal of harmonizing the trading book designation across jurisdictions, but would like to note that in some areas a rigid approach in terms of a presumptive list of trading book products would result in a construct that is not aligned with risk management. We would encourage the BCBS to acknowledge that there will always be need for regulators to apply some form of judgment on the appropriateness of a presumptive list to specific circumstances of individual institutions.

### **Disclosures and floors**

We have reservations about using the SA as a floor and the Pillar III disclosure of SA numbers on a desk level. Both of these would make the SA the binding stakeholder capital metric for banks and, thus we believe, would result in similar unintended consequences. In particular, the lack of risk sensitivity in the proposed SA could result in the misallocation of capital.

For the proposed disclosure of SA numbers on a desk level, in particular, we do not think it would be useful given the differences in banks' desk structures and trading strategies. To address this, we believe that it is essential to allow for aggregation of desks along firm specific business lines that can be different from one bank to another.

With regards to the proposal to make the SA as a floor to internal models, if the objective is to achieve more comparability in the resulting capital numbers, we believe this is better achieved through model portfolio exercises in combination with harmonization of supervisory approval practices.

### **Securitization**

Attached is a list of questions regarding securitization which we tabled informally in December 2013 for discussion. We very much appreciated the opportunity to discuss these briefly with members of TBG earlier this week, and while we have been unable to respond in detail to the proposed treatment of securitization under the FRTB by today's date, we look forward to continuing our dialogue and providing technical comments on securitization issues going forward. We thank the TBG for their flexibility in this regard. In particular, we believe it is important that the process for the re-casting of the rules for the treatment of securitization in both the trading and the banking books be coordinated, and move together. Such coordination, would avoid (for example) creating unlevel playing fields between firms which may have differently sized trading or banking books. This should be the case both in terms of content, and timing of implementation. As the TBG is aware, the proposals for the banking book are currently undergoing a second round of consultation, in which the undersigned associations are engaged.

### **CVA**

There is a lack of clarity as to what the actual impact to CVA will be from the transfer into ES from the current VaR methodology and application of liquidity horizons, which is unclear in the FRTB proposal. We would propose that any changes made to CVA must be done in conjunction with any changes made via the wider CVA review referenced on page 13 of the proposals (i.e., appropriate treatment of all CVA book hedges including credit risk hedges, and any new design features introduced).

We would like to express our appreciation to the BCBS for the opportunity to comment, and we remain at the BCBS's disposal to discuss and elaborate on any of the issues we have raised in our letters.

Yours faithfully,



George Handjinicolaou, Ph.D



Simon Lewis



Andres Portilla

c.c.: Norah Barger & Alan Adkins, Co-Chairs, Trading Book Group; Ju Quan Tan, Member of the Secretariat, BCBS

**Attachment 1** - A copy of our January 8, 2014 letter

**Attachment 2** - A copy of our January 3, 2014

**Attachment 3** - A copy of our January 19, 2014

**Attachment 4** - List of questions regarding securitization



January 8, 2014

The Honorable Stefan Ingves  
Chairman  
Basel Committee on Banking Supervision  
Bank for International Settlements  
Centralbahnplatz 2, CH-4002 Basel  
Switzerland

**Subject: Request to revise the Fundamental Review of the Trading Book (FRTB) and QIS Timeline**

Dear Governor Ingves:

The undersigned Associations would like to bring to your attention the attached letter that we sent to the BCBS Trading Book Group (TBG) on January 6, 2014, expressing our fundamental concerns about the announced timeline for the industry to run the Quantitative Impact Studies (QISs) and for the TBG to complete the FRTB. The letter is a further iteration to our earlier communication outlining concerns, reflecting our members' increased understanding of the scope and magnitude of the proposed changes as well as the amount of work still required from the TBG to complete the framework.

While we very much appreciate the decision to push back the completion of the FRTB to mid-2015, we still think that this revised timeline would not provide sufficient time to re-examine some of the fundamental changes being proposed, and to develop and implement the systems and processes required.

We also believe that the fundamental nature of the proposals, which represent a significant departure from current industry practices, requires an iterative process of policy-making combined with QIS exercises and resulting calibration and recalibration in order to ensure that the right outcome is achieved. A full QIS cycle would require at least one year to complete. Subsequent to that, additional time would be needed to reflect the QIS results in the calibration of the proposals. Hence the amount of time needed to complete the full FRTB work would depend on the number of iterations necessary. Our current estimate is that the process would need to be extended at the very least to sometime in 2016.


The attached letter to the TBG explains in detail our reasons for requesting a material change in the timeline. We are at your disposal to elaborate further on these issues.

The industry appreciates your consideration of this request and we reiterate our commitment to a constructive dialogue with the BCBS.

Yours faithfully,



**George Handjinicolaou, Ph.D**  
Deputy CEO and Head of ISDA  
*Europe, Middle East and Africa*



**Simon Lewis**  
CEO  
*GFMA*



**Timothy D. Adams**  
President and CEO  
*IIF*

C.C. Mr. Wayne Byres, Secretary General, BCBS

January 6, 2014

Norah Barger & Alan Adkins, Co-Chairs, Trading Book Group  
Ju Quan Tan, Member of Secretariat, Basel Committee on Banking Supervision  
Basel Committee on Banking Supervision - Bank for International Settlements  
Centralbahnplatz 2, CH-4002 Basel, SWITZERLAND

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[baselcommittee@bis.org](mailto:baselcommittee@bis.org)

**Subject: Request to Revise the FRTB and QIS Timeline**

Dear Ms. Barger and Mr. Adkins,

The undersigned Associations appreciated the opportunity to meet with the Basel Committee's Trading Book Group (TBG) on December 10 to discuss the second consultative document on the Fundamental Review of the Trading Book (FRTB).

While we intend to provide the TBG with detailed comments on the proposals by the consultation deadline of January 31<sup>st</sup>, we decided to write to you at this time to convey our concerns that the announced timeline<sup>1</sup> for the industry to run Quantitative Impact Studies (QISs) and for the FRTB to be completed by the TBG is insufficient, given the wide ranging objectives of the TBG. This is a further iteration to our previous letter to the Co-Chairs and Wayne Byres and reflects our greater sense and understanding of the level of work required in terms of completing the framework and ensuring that firms have the technical capability to be able to participate in the QISs in a meaningful way.

Firstly, we want to assure you that we very much support the objectives of the TBG and we view the FRTB as a great opportunity to review and strengthen the methods used to define minimum regulatory capital requirements for traded market risk.

Secondly, we note that the level of regulatory capital required for the trading book was materially increased (multiplying it by several times compared to its prior level) by the Basel 2.5<sup>2</sup> framework. As noted in the June 2012 and October 2012 report to the G20 leaders, the revisions introduced in Basel 2.5 were "in response to lessons from the financial crisis" and as required by the G-20 mandate<sup>3</sup>. Based on the most recent August 2013 report to the G20 leaders, Basel 2.5 has largely been implemented globally. Basel 2.5 was then supplemented by Basel III, via capital requirements for counterparty credit risk (e.g. CVA VaR) and the new overall capital buffers.

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<sup>1</sup> At the December 10<sup>th</sup> meeting the joint trade associations were told that the TBG planned to have banks run two QISs, using both the internal model approach (IMA) and standardized approach (SA), on: a) the second set of SIG-TB trading benchmark portfolios in the February-April time period and b) each bank's full trading book in the July-October time period, in order that the TBG could complete the FRTB no later than mid-year 2015

<sup>2</sup> By Basel 2.5 we refer to the package of papers issued by the Basel Committee in July 2009 that updated the regulatory capital framework for market risk.

<sup>3</sup> As noted by BCBS: "As an important response to the crisis, the Committee introduced a set of revisions to the market risk framework in July 2009 (part of the "Basel 2.5" rules). These sought to reduce the cyclicity of the market risk framework and increase the overall level of capital, with particular focus on instruments exposed to credit risk (including securitisations), where the previous regime had been found especially lacking."

Therefore, while we do not presume to specify the appropriate level of regulatory capital required for the trading book, we conclude from the above and from our previous conversations with the TBG that the short timeframe for completing the FRTB is not being driven by an assessment by the Basel Committee (BCBS) that it needs to materially increase the overall level of minimum regulatory capital for the trading book; nor by shortcomings in the market risk capital framework that require immediate attention.

The changes proposed within the FRTB are indeed fundamental, and would require major construction work within firms before a meaningful QIS can be conducted. Furthermore, given the scale of the changes, we want to ensure that we do not arrive at suboptimal final rules with undesirable outcomes by rushing the process, thereby missing the opportunity to fundamentally strengthen the trading book framework.

For these reasons, and the reasons set out in the Appendix, we believe that expanding the time that is scheduled for the completion of the FRTB is crucial in order to enable the industry and the TBG to work together in a constructive, iterative process to achieve the TBG's objectives of the review.

Finally, in the appendix to this letter, we have enumerated in more detail the reasons for requesting a material change in the timeline that has been scheduled for running the QISs and completing the FRTB:

- **We believe that the fundamental changes that the FRTB aims to introduce require an iterative process to ensure that the right and intended outcome is achieved;**
- **The planned QIS timeline for the proposed Standardised Approach (SA) is inadequate, given the significant work required to build functionality to run calculations within a completely new framework;**
- **Due to the material changes in the proposed Internal Models Approach (IMA), the planned timeline for the QIS is not sufficient;**
- **The joint trade associations have been given a very short timeframe to formulate and submit robust counterproposals to key components of the IMA and the SA; and**
- **Finally, the industry would like the opportunity to work with the TBG in refining the framework and designing and launching the QISs, noting that this iterative process will take time.**

In light of the industry's forthcoming counterproposals, and the need for sufficient time to further refine them, we recommend that the TBG defers its first QIS on the FRTB until the TBG has had the opportunity to evaluate and integrate the industry's recommendations into the SA and IMA proposals as it deems appropriate. Then an iterative process could begin, with sufficient time set aside for banks to build the infrastructure needed to run each QIS; we have expanded on this in the appendix.

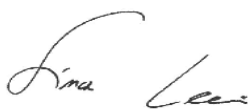
The industry appreciates your consideration of the proposed extension (see appendix) of the FRTB timelines and we remain at your disposal in the development of the new trading book framework.

As a matter of courtesy, and in order to highlight our material concerns regarding the timeline, we intend to send a similar letter to the BCBS Chairman, Stefan Ingves.

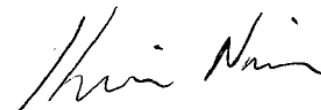
Yours faithfully,



George Handjinicolaou, Ph.D  
Deputy CEO and Head of ISDA  
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Simon Lewis  
CEO  
GFMA



Kevin Nixon  
Managing Director  
IIF

## **Appendix: Industry concerns relating to the QIS process and the FRTB:**

The following are our main concerns about the QISs and FRTB timelines:

- **We believe that the fundamental changes that the FRTB aims to introduce require an iterative process to ensure that the right and intended outcome is achieved.**
  - The FRTB proposes fundamental changes to the current IMA and SA, which represent a significant departure from current industry practices and thus require careful examination and calibration. The industry believes the extent of the proposed changes in the FRTB are similar in terms of scale and complexity to those put forward for credit risk capital under the Basel II framework, which was subject to several formal consultation papers and up to as many as six QISs. We believe a similar iterative process of policy making combined with calibration and recalibration should be adopted for the FRTB. This iterative process will be required since calibration issues will arise as QIS work is performed. Moreover the sheer complexity of the QIS task will be better addressed by considering product/portfolio segments rather than large aggregate portfolios. It is possible that a narrow scope QIS on simpler products could be done earlier (within 6-9 months) while more complex issues around multiple liquidity horizons, non-linearity impacts on large shocks etc. and standard rules re-working may take more time.
  - Given these fundamental changes to the framework, we do not believe that sufficient time has been given to the industry to develop the necessary tools to engage appropriately and responsibly in any FRTB QIS efforts on the timeline proposed.
  - We also note the very rational encouragement – which is explicitly communicated by the TBG in the second consultative paper on the FRTB – to have as broad a spectrum of banks as possible partake in the QIS. This notion appears to be in a direct contradiction with the set timelines that would enable only a small proportion of banks to participate in the QIS. We believe that it is essential to have a wide range of banks with trading businesses involved in the QIS, especially due to the considerable emphasis which is put on the calibration of the requirements and how they apply to different desk structures and instruments with varying liquidity characteristics.
- **The planned QIS timeline for the proposed SA is inadequate, given the significant work required to complete the SA framework and that some identified issues of the framework need to be corrected for.**
  - As explained by the joint trade associations at the December 10<sup>th</sup> meeting, the proposed SA would require banks to build an extensive parallel infrastructure purely for the purpose of calculating the standardized regulatory capital requirement. The infrastructure would consist of:
    - a) Yield curves and calculated Option-Adjusted Spreads (OAS) for each debt security, forward FX, and all other derivative contracts, different to those used for pricing today;
    - b) Different processes to calculate the Present Value (PV) of all future (fixed) cash flows of debt securities, forward FX, and all other derivatives, which could be located across various systems and geographical locations;
    - c) Processes to map the interest rate risk of each forward cash flow to regulatory-specified tenor buckets, and processes to map other risk factors to other type of buckets; and
    - d) Processes to aggregate all current and PV'ed cash flows for each type of risk factor and currency, in accordance with regulatory specified rules.

- As discussed and as acknowledged by the TBG at the December 10<sup>th</sup> meeting, the proposed SA is still under development as for example it currently ignores all floating rate cash flows. This will make the regulatory capital calculated during a QIS based on the proposals irrelevant and incomparable with the regulatory capital calculated under the proposed IMA rules.
- We believe that the QIS process would benefit from a review of the industry's concerns with regard to the current SA proposals, together with a dialogue on alternative proposals for the SA the industry is working on, which we believe will better achieve the objectives of the FRTB. This would then provide an opportunity to design a more appropriate QIS with relevant instructions to yield the best possible results for calibrating the SA.
- **Due to the material changes in the Internal Models Approach (IMA), there is insufficient time for implementation for the QIS, or to develop, in detail, necessary adjustments to address issues identified.**
  - As explained by the joint trade associations at the December 10<sup>th</sup> meeting, the liquidity horizon component of the IMA, as written, will create material implementation work. It will not be possible for most firms to build the processes to do that work for benchmark portfolios within the February-April timeframe. Additionally, most banks will have difficulty building the enhanced infrastructure required to implement the liquidity horizon component in time to do the proposed full trading portfolio QIS by the July-October timeframe.
  - In order to calculate an Expected Shortfall (ES) that factors in market liquidity as proposed, pricing grids/models would need to be recalibrated to work with a wider range of shocks, data infrastructure would need to be overhauled and data would need to be repopulated and revalidated to accommodate the use of overlapping long horizon returns. Furthermore, factor models and distributional assumptions would also need to be revised/re-estimated accordingly. The amount of time needed to implement all such changes will be very material.
- **The joint trade associations have been given a very short timeframe to formulate and submit robust counterproposals to key components of the IMA and the SA.**
  - The TBG requested that the industry submit its counter proposals by January 6<sup>th</sup> regarding the SA so that it can review them during its meeting in Singapore in late January. We note that this gave the industry less than a month to develop, formulate, analyze and evaluate all the consequences of its counterproposals. Within the imposed short time frame the industry was only able to submit to the TBG an outline of its counterproposals.
  - We hope the TBG will consider the merits of the outline of our counterproposals, and allow the industry more time to further develop them. We believe that given appropriate level of consideration and adequate time to develop these proposals, time and resources could be saved in the long run.

- **Finally, the industry offers its support to the TBG in designing and launching the QISs.**
  - We encourage the TBG to engage and coordinate with the industry in designing and launching the QISs. We believe industry insights can help further improve the design of the QIS in order to ensure the QIS is both efficient and provides the data that banks and the TBG require. In addition, improved coordination will ensure the quality of the output of the exercise, which is quite necessary to come up with robust calibration of the FRTB. We believe this will take time through an iterative process that adjusts the framework as we work through its design and calibration.

### **Industry's proposal for revised timeline**

We have provided a proposed framework for determining a timeline for completing the FRTB that acknowledges the difficulties in achieving a robust and well-calibrated new framework for the trading book.

The reason we can only propose a framework at this point (as opposed to a specific timeline) is that the amount of time for each step, and the total number of steps needed to complete the FRTB are contingent on the detailed contents of the TBG's revised IMA and revised SA proposals. The detailed contents of each revision of the IMA and SA will affect the amount of time required by the industry to build new, or enhance existing calculations and data feeds.

We list two estimates of the minimum lead time required by a bank to build/enhance the components of its Risk IT infrastructure (i.e. calculation processes, data feeds, central aggregators and/or simulation engines) to run a full QIS on the bank's global trading positions, for each iteration of the IMA and/or SA proposal, contingent on whether or not enhancements need to be made to calculations and feeds from a bank's globally dispersed product processors:

- For each new proposed IMA or SA that requires enhancements to calculations and feeds from global product processors, banks typically will need a lead time of between six months to a year<sup>4</sup> to build/enhance, test, and validate:
  - The separate calculation processes on and data feeds from each product processor around the world required by the proposal (note different calculations and/or feeds may be required for the IMA and the SA)
  - The central risk aggregator required by each proposal (note separate aggregations will be needed for the IMA and the SA)
  - The simulations required by an IMA and/or the aggregation rules specified in an SA.

The actual time will depend on the details of each proposal, as well as the size and global span of a bank's infrastructure. To provide some context, it is our estimate that it would take most banks at least one year to build the infrastructure required by the proposed SA, as currently written.

- If the proposed version of the IMA and SA does not entail enhancement to calculations and feeds from global product processors, and only requires enhancements to either a) the simulations required by an IMA, or b) the aggregation rules specified in an SA, then the lead time to enhance the infrastructure will be much shorter, typically around three to six months, depending on context.

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<sup>4</sup> This will also depend on other regulator-driven and internal priorities; the estimates here assume that there are no other major regulatory initiatives being implemented at the same time.

January 3, 2014

Norah Barger & Alan Adkins, Co-Chairs, Trading Book Group  
Ju Quan Tan, Member of Secretariat, Basel Committee on Banking Supervision  
Basel Committee on Banking Supervision - Bank for International Settlements  
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**Re: Second Consultative Document Fundamental Review of the Trading Book<sup>1</sup> - BCBS 265 – Proposed revised standardized framework**

Dear Ms. Barger and Mr. Adkins,

This letter contains initial comments from the International Swaps and Derivatives Association, Inc (“ISDA”), the Global Financial Markets Association (“GFMA”) and the Institute of International Finance (“IIF”, together “the Associations”), on the Quantitative Impact Study (“QIS”) of the Basel Committee on Banking Supervision (“BCBS”) Second Consultative Document *Fundamental Review of the Trading Book* dated October 2013 (“Fundamental Review” or “FRTB”). It focuses solely on the proposed revised standardized framework.

We propose, in this paper, to recast the standardized framework of the FRTB in terms of the existing risk factor sensitivities, which are currently calculated by the banks’ pricing models. The risk factor sensitivities are more readily available, controlled and their utilization would reduce the cost and time of the implementation of the Fundamental Review.

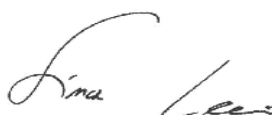
Below we discuss the various components of our proposal as well as topics mentioned in the BCBS’s letter of December 17th, 2013. More time is required to specify all those components in detail but we believe that it is very feasible to meet the BCBS’s objectives within the framework that we describe.

We stress again our commitment to participate constructively in the consultative process. We do sincerely hope you find our initial remarks helpful.

Yours faithfully,



George Handjinicolaou, Ph.D  
Deputy CEO and Head of ISDA  
Europe, Middle East and Africa



Simon Lewis  
CEO  
GFMA



Andres Portilla  
Director, Regulatory Affairs  
Institute of International Finance

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<sup>1</sup> Basel Committee on Banking Supervision, October 2013

## 1) Considerations

- The Basel Accords focus on the capitalization of large, internationally active banks.
- We note that this group of banks includes some regional and other banks with relatively limited trading books.
- We expect that national supervisors will be sensitive to the challenges and costs that small, non-internationally active banks could face to implement risk-sensitive approaches (standardized or model-based) and will adopt the proper simplified frameworks for those banks but recognize that certain jurisdictions apply the requirements more widely.

Moreover:

- The vast majority of the trading books of banks are comprised of vanilla and linear instruments.
- For vanilla and linear instruments, risk sensitivities (i.e. the first-order derivatives of the prices of the instruments with respect to the underlying risk factors) capture most of the relevant market risks
- It is unlikely that a standardized approach, no matter how complex it may be, will ever be able to capture all types of higher-order and basis risks.
- Thus, from the start, the framework should be parsimonious and sufficiently conservative.
- Complex, convex, higher-order, etc... risks and instruments can be treated with conservative (less risk sensitive) charges; they can be mapped to special buckets in each risk class.
- Those charges can be based on notional amounts or market values or the absolute values of first-order sensitivities to volatility, correlation, etc...
- The need to source cash flows from trading systems, the build of a large number of interest rate curves and a large number of implied-OAS models, as proposed in CP2, would make the implementation of the standardized framework difficult, time-consuming and costly as well as less controlled.
- Also the discounted cash flow framework would require the development, testing and validation of a large number of models for interest-rate curves, floating/contingent cash flows and implied OAS models. Those models would live outside of the banks' trading systems; they would be used for regulatory capital calculation only. This raises concerns with respect to controls and on-going validation of those models.

We therefore propose a simpler approach that we believe has the benefit both of meeting the TBG's goals and is better aligned with internal risk metrics and management.

In its letter dated 17 December 2013, the Trading Book Group (TBG) asked the industry to address some specific points in the industry's counterproposal:

- *Consistency with the objectives and rationale of the revised Standardized Approach as set out in the October 2013 consultative paper, including the principle of limited model reliance*

As we explain in Sections 2 and 3 below, the TBG's framework will require banks to implement a large number of *new models*. These models will be used for regulatory capital calculation only and they will live outside of the banks' long-established, validated, controlled, use-tested risk management platforms. We see more model and operational risks in the new, to-be-built models than in the current extensively used pricing models.

- *Compatibility with the GIRR, CSR and FX approaches in the draft Accord text (replacing cash flows with sensitivities, but with limited changes to the overall approach and/or calibration)*

As we explain in Sections 4, 5 and 6 below, it is possible to recast the TBG's proposed framework by replacing the discounted cash flows by risk factor sensitivities and thus preserving the key elements of offsetting, diversification and aggregation that were specified by the TBG. The risk weights will need to be recalibrated to reflect the volatilities of the risk factors since they were specified based on the TBG discount factor methodologies and on the fixed legs only.

- *Sensitivities available at the instrument level (for example, this is necessary to recognize hedging for CSR at the level of the name, or to capture basis risk for GIRR.*

Trade level risk factor sensitivities are currently mostly available in the market risk systems of banks.

*The TBG also said that it would give particular consideration to the following features of the counterproposal:*

- *The extent to which non-linear ('convexity') risk is captured*

We describe a possible simple approach to deal with non-linear and other complex risks in Section 6. This is an area that will clearly require more work to refine our simple approach. Notice that in CP2 this area is not completely addressed either.

- *The extent to which the counterproposal gives rise to model risk, or potential inconsistency arising due to the use of models that could vary materially across different firms.*

Model risk is addressed in Sections 3 and 4 below. Standardization and comparability will be achieved by a) precisely defining the risk factor sensitivities and b) by using benchmark trades and portfolios to verify that the banks' calculations of the sensitivities fall within acceptable tolerance ranges. The benchmark trades and portfolios would give regulators the metrics to enforce consistency.

- *The extent to which sensitivities are subject to adequate independent validation and other measures to ensure their accuracy*

This is discussed in Section 3. Risk factor sensitivities are extensively used, validated and controlled as part of the banks' day-to-day risk management processes and they are critical inputs to various internal and regulatory risk measurement models and stress test frameworks.

- *The extent to which the counterproposal can result in materially different capital outcomes from the cash flow approach*

All else being equal and by itself, the recasting of the framework in terms of risk sensitivities should not be a cause of differences in capital, especially considering that the framework will be fully calibrated via QISs. It is proper to expect that a framework based on risk sensitivities will be more accurate to capture risks and to allocate regulatory capital.

- 2) **Standardized charges based on instruments' cash flows are difficult and costly to implement in the banks' current risk systems. In addition, they would require banks to develop a large number of "new models" to construct interest rate curves, project floating and contingent cash flows, discount the cash flows and to imply OASs.**

Banks' current trading systems use cash flows to price the trades but they do not store or export those cash flows to other risk management systems. A large, internationally active bank may typically have a few million trades whose valuation and risk are calculated by, say, fifteen different trading systems deployed across the organization. Regional and medium-sized internationally active banks may typically have three or more trading systems and several hundred thousand to a few million trades; these systems are often vendor-supplied and vendor-supported. To obtain the detailed cash flow information necessary to calculate standardized capital charges as specified in the FRTB second consultative paper (CP2), banks

would have to implement modifications to their trading systems to *store and export* each trade's cash flows to the place where the regulatory capital calculation will take place. They also would have to build the repositories to receive and store the cash flows so that they can be used in the standardized framework. This will be a substantial technology effort simultaneously with other competing regulatory-driven implementations. It will *consume a large amount of resources* and it is likely to take *a long time to implement*.

After the implementation, testing, and validation of the new data flows, the day-to-day production of the cash flow data will involve a large volume of data movement between the multiple trading systems and a central location where the standardized capital charges would be calculated. Our preliminary and rough assessment of the size of the new data flows suggests that they could increase the current data flows by a factor between two and three. The on-going monitoring and controls of the completeness and accuracy of the new data flows will be sizeable and they will introduce additional demands on the current risk measurement platforms.

In addition to the above, banks will have to create new *discount cash flow (DCF) models* and *implied-OAS models* for many different types of instruments rather than use their existing pricing models that have been developed over many years. Those new models will incorporate bank-specific choices and assumptions about many, possibly thousands, of interest rate curves and curve building methods. The new models will have to be developed, tested and validated. Additional controls will have to be created for the new models since, most likely, they will not be the same models that are used by the banks' current pricing systems. It is unreasonable to expect banks to develop, validate, and develop expertise in the models in several months what would normally take years to accomplish.

Finally, the framework proposed in CP2 does not handle the trades' floating and contingent cash flows. We have already mentioned the need to incorporate these flows in the framework and this would not be an easy task to perform. It would require additional models to project the future values of the floating and contingent cash flows.

### **3) The current pricing models used by banks are extensively used, relied upon, validated and controlled. They are at the foundation of all valuation and risk management of banks.**

Banks' pricing models are the tools that are used to value and risk manage their trades on a continuous, ongoing basis. The pricing models are *tightly calibrated to market prices on a daily basis*. The models can be thought of as *interpolators* of the market prices that are relevant to value the particular type of instrument. Large teams of model developers, technologists, independent validators, financial accountants, internal and external auditors, traders, risk managers and regulators examine and use the outputs of those models regularly. Many millions of trades are priced and risk managed on a daily basis and the incident of significant flaws or errors are extremely rare.

It is imperative to firms that these pricing models are appropriately calibrated in order to produce accurate valuations and calculate risk factor sensitivities.

The sensitivity of the price of an instrument to the change of an input risk factor is calculated by shifting the level of the risk factor by a very small amount, recalibrating the pricing model to the new level of the risk factor and re-pricing the instrument. The difference between the final and initial prices is the sensitivity of the price of the instrument to the risk factor shock. Dividing the price difference by the size of the shock, we obtain the sensitivity of the price per unit of the shock.

*Examples: “delta” is the sensitivity of the price of an option with respect to changes of the price of the underlying asset. “Vega” or “kappa” is the sensitivity of the price of an option with respect to the change in the option’s implied volatility. Etc...*

Risk sensitivities are extensively used for many different risk management purposes:

- a) As part of banks’ risk monitoring and limiting frameworks, banks limit the size of those sensitivities with a finely granular mesh of limits at the trading desk level. Some banks can have thousands of limits based on risk sensitivities that are automatically monitored on a daily basis;
- b) As input risk positions for models like VaR, stressed VaR, CRM, IRC;
- c) As input for stress test frameworks, especially for linear risks;
- d) As a tool for decomposing and explaining P&L;
- e) As input for regulators’ stress test frameworks like the Federal Reserve’s CCAAR.

The extensive use of risk sensitivities imposes a *substantial amount of discipline and controls on their calculation, testing and validation*. The formal validation of pricing models usually includes a lot of work on the validation of the risk-factor sensitivities produced by the pricing models.

Importantly, the use of risk sensitivities addresses automatically all cash flows, fixed, floating and contingent. Thus, it automatically fixes the problem of CP2 in omitting floating and contingent cash flows.

Finally, the level of sophistication in the pricing models reflects years of experience and fine tuning. The models have evolved over time as banks continue to improve the models and incorporate new market experiences, behavioral changes, etc. With CP2, the Basel Committee would require banks to ignore the history of both market and model experience. Banks would be required to develop and use a model that is on the same order of complexity as the pricing models banks already use, but that has not been tested over time.

#### **4) Risk factor sensitivities based on pricing models can be tightly defined by regulators and validated against benchmark trades and portfolios for comparability.**

In order to promote uniformity in the calculation of standardized charges, the sensitivities can be standardized across banks. Regulators would define precisely what the sensitivities to be calculated are.

*Example: the sensitivities of the price of an instrument with respect to its underlying interest-rate curve can be defined in terms of partial sensitivities, i.e. the price changes obtained by shocking each vertex of the interest rate par curve individually by 1 basis point.*

*Example: sensitivity of the price of an option with respect to its underlying volatility surface can be defined as the change in price of the option for a 1% parallel shift of the underlying volatility surface.*

Banks would implement those standard definitions and they would test their implementations against a *set of simple and complex benchmark trades and portfolios* that would be specified by the regulators.

Regulators could then compare the results across banks and determine that they are *sufficiently uniform* and lie within *acceptable ranges of variance*. In the case that a certain bank is identified as having calculated risk sensitivities outside of the acceptable range, the bank’s regulators could examine the reasons for that and possibly suggest changes in the bank’s calculation.

The Associations could propose definitions of the various risk factor sensitivities for each risk class. The definitions would attempt to strike the balance between *appropriate risk capture, simplicity, ability to*

*implement and transparency.* Even if a bank cannot implement the calculation of sensitivities exactly as specified in the rule, the bank can use alternatives and proxies to the extent that those would produce sensitivities that fall within an acceptable range of variance as required by the bank's regulator. The regulator can use the uniform set of benchmark trades and portfolios to gauge the extent of the variance.

The number of risk factors is related to the resolution of the standardized approach to account for the various types of basis risks. The approach could be made simpler for smaller banks whose trading books are simpler by reducing the resolution (i.e. the number of risk factors) of the standardized frameworks for those banks.

**5) Offsetting, aggregation and diversification can be mostly preserved as specified in the FRTB CP2.**

Risk sensitivities can be mapped to the various risk buckets in each risk category similarly to how it is specified in the CP2. Offsetting, diversification and aggregation could proceed mostly as specified in CP2. Of course the risk weights would have to be modified and specified in new units since the risk measures are risk factor sensitivities as opposed to discounted present values of cash flows.

*Example 1: General Interest Rate Risk (CP2, page 63)*

*Each partial interest rate sensitivity would be allocated to the corresponding vertex of the interest rate curve as in paragraph 96, page 64. The correlation matrices on page 65 would be recast in terms of the correlations of the various par yields along the interest rate curve.*

*Example 2: Credit Spread Risk (CP2, page 66)*

*We could define the credit spread sensitivity of an instrument as the price change caused by 1 basis point parallel shift of its credit spread curve. The sensitivity can then be allocated to the credit quality buckets and maturities of the table on page 67. The risk weights in that table need to be recast in terms of credit spread volatilities.*

The examples above show that the recasting of the discounted cash flows in terms of risk factor sensitivities is quite straightforward. This is not a surprise since discounting cash flows and aggregating them in buckets along the maturity spectrum of a curve is essentially a crude mechanism to obtain the price sensitivities to changes of particular points/sectors of that curve.

**6) Special buckets for convexity and, more generally, complex risks in each risk class to determine capital add-ons to risks that are not properly or completely captured by risk sensitivities.**

Notice that the vast majority of trades in trading books, both large and small, are mostly linear and vanilla. Thus, standardized risk factor sensitivities as described above would be sufficient to capture most of the risks. A small portion of trades is more complex and contains risks that are more difficult to fully capture. Those more complex trades could be assigned to special buckets as described below.

There should be special, possibly notional-based or scenarios-matrix based (as opposed to sensitivity-based) buckets in each risk category to calculate special and additional capital charges on risks that are too complex to capture via risk factor sensitivities alone. A capital add-on for option convexity could be charged via those buckets too, if required. Also, the intrinsic complexity of some exotics and structured trades could also be captured in those buckets and properly charged.

Below, we provide a tentative list of categories of trade types that could be used to assess the complexity of the trades. Products in the categories (3) and (4) are the ones that are most likely to be dealt via the special, complex product buckets.

(1) *Linear products*: trades with mostly linear pay-offs (e.g. bonds and equities) and derivative products which have linear pay-offs in the underlying risk factor (e.g. interest rate swaps, FRAs, total return swaps).

(2) *Vanilla options*: European, American and Bermudan put and call options (including caps, floors and swaptions) and other trades with similar features.

(3) *Exotic options*: Asian options, digital options, single barrier options, double barrier options, lookback options, forward starting options, compound options and other trades with these features.

(4) *All other option based products*: basket options, quantos, outperformance options, timing options) and other trades with these features.

This section needs more development but the overall direction is that complex risks will be capitalized more crudely than simple risks. This is consistent with the notion that a standardized framework cannot capture all risks in the most sensitive way.

January 18, 2014

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**Re: Second Consultative Document Fundamental Review of the Trading Book<sup>1</sup> - BCBS 265 – Proposed revised standardized framework**

Dear Ms. Barger and Mr. Adkins,

This letter contains initial comments from the International Swaps and Derivatives Association, Inc (“ISDA”), the Global Financial Markets Association (“GFMA”) and the Institute of International Finance (“IIF”, together “the Associations”), on the Basel Committee on Banking Supervision (“BCBS”) Second Consultative Document *Fundamental Review of the Trading Book* dated October 2013 (“Fundamental Review” or “FRTB”). Following the submission on 3<sup>rd</sup> January 2014 of the industry comments on the proposed revised standardized framework, this letter focuses solely on the trading book banking book boundary, the model independent approval process, capturing market illiquidity, the treatment of credit, disclosure requirements and floors.

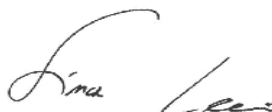
We propose, in this paper, to recast the proposed revised approaches of the FRTB. Below we discuss the various components of our proposal on the trading book banking book boundary, the model independent approval process, capturing market illiquidity, the treatment of credit, disclosure requirements and floors. More time is required to specify all those components in detail but we believe that it is very feasible to meet the BCBS’s objectives within the frameworks that we describe.

We stress again our commitment to participate constructively in the consultative process. We do sincerely hope you find our initial remarks helpful.


Yours faithfully,



George Handjinicolaou, Ph.D  
Deputy CEO and Head of ISDA



Simon Lewis  
CEO



Andres Portilla  
Director, Regulatory Affairs

<sup>1</sup> Basel Committee on Banking Supervision, October 2013

## 1. Trading book banking book boundary

We understand and support the goal of harmonizing the trading book or banking book designation across jurisdictions, but would like to take the opportunity to highlight a few areas where a rigid approach in terms of a presumptive list for a banking book or trading book would result in a construct that was not aligned with risk management. So with regards to the presumptive list, we request the Committee consider the below cases, which may require an exception or an amendment to the general presumption.

### **General Criteria: Any instrument which is managed on a trading desk shall be included in the trading book**

- There are instances where the trading desk manages instruments which are regulatory banking book instruments, along with regulatory trading book instruments. This criterion to include such instruments in the trading book would conflict with the required banking book designation.
- Examples are:
  - A distressed debt trading desk which makes markets in distressed and defaulted names. This desk may, at times, have private equity due to restructuring/ bankruptcy events related to the debt they trade. The desk would make markets in the private equity, which is a regulatory banking book activity, along with the rest of its trading book inventory.
  - Assets held with the intent to securitize are typically managed and hedged by the trading desk, but are regulatory banking book exposures.
  - Assets held for regulatory risk retention, where certain jurisdictions have mandated that sponsors of securitizations retain on their books 5% of the value of the assets that they securitize, in order to better align the interests of participants in the securitization process. Typically, these positions would be managed by the trading desk, although they are regulatory banking book exposures.
  - A trading desk might have activities or manage products for which the bank's supervisor has requested a banking book classification through its supervisory authority.

These examples point to the need to introduce more flexibility in this general criterion and not presume that any instrument managed on a trading desk shall automatically be included in the trading book. It seems there are two potential options – either to allow flexibility for a trading desk to manage banking book positions in certain instances or to allow flexibility for these positions, which are managed by a trading desk, to be designated as trading book positions, assuming sufficient liquidity exists.

### **Criteria #1: Instruments held as accounting trading asset or liability**

- This presumption creates a link with the accounting framework, which differs from jurisdiction to jurisdiction (e.g. US GAAP, IFRS, and Japanese GAAP). The deviation process and the extent of the deviation will therefore depend on the accounting framework prevailing in each jurisdiction.
- In addition, accounting frameworks are in a state of transition which may be disruptive to capital frameworks, if regulatory accounting were too closely linked (e.g. we understand that “Held For Trading” and “AFS” categories are being considered for removal with IFRS9 application)
- We request clarification on structured notes, which are often booked as long-term debt (for US GAAP and IFRS). These instruments have market risk that is often hedged by a trading desk, but are not currently treated as having market risk capital held against them in all jurisdictions, as they are often not booked as a trading liability, but rather as long term debt. In these jurisdictions, the hedges are trading book positions and would function as open risk positions. We recommend that the presumptions are clarified such that the structured note and its hedge may be both treated as trading book positions, if the intent and risk management criteria are satisfied. Additionally, assuming banks are allowed to have a difference to accounting designation and include such positions in the trading book, we would seek to clarify that the own name credit risk on the structured notes does not need to go through the IDR calculation.

- Similarly, underwriting commitments are an example of the conflict among trading book/banking book boundary presumptions. While commitments are not included within trading assets for accounting purposes, underwriting activity is presumed to be trading book. Often banks have commitments to underwrite for short time periods before the activity funds – we request that the accounting presumption be flexible enough to allow underwriting commitments to be classified for regulatory capital purposes along with the associated underwriting activity, rather than being tied to the accounting designation.
- We recommend additional language to clarify that instruments which are hedges to banking book exposures, including those hedges that qualify for hedge accounting treatment, are intended to be exempted from the trading book presumption. More generally, the framework should specify that the presumptive list does not intend to break apart a position from its hedge, which would serve to divorce capital charges from economic risk. Examples are:
  - Options and futures hedging banking book positions
  - Interest rate or fx swaps hedging Tier 1 instruments for which the hedge accounting is not applicable
  - Credit hedges that are not recognized for credit risk mitigation (e.g. index/single name proxy hedges).
- We request clarification for treatment of CVA hedges as part of the review of CVA VaR.
- In terms of designating a banking book hedge, we assume that the current process of designating a banking book hedge at inception will be incorporated in the new framework. We request clarification of the treatment of a hedge if it is deemed to no longer be effective.
- We request clarification on netting of longs and shorts in the banking book as part of the upcoming IRRBB and CSRBB review. We recommend that longs and shorts on the same underlying be netted (e.g. if a loan that was hedged was sold, requiring a reduction in the cds hedge, typically the derivative would not be cancelled, but offset by a new derivative).
- Basel 3 LCR requires banks to maintain a liquidity buffer and to demonstrate market liquidity of the securities. We request confirmation that such securities would not be treated as trading book positions, as they would not be risk managed as such.

## **Criteria #2: Instruments from market making or underwriting activities**

- As noted under the general criteria, a trading desk may hold a mix of trading and banking activity and make a market in such products (e.g. private equity). Therefore, there should not be a presumption that market making and underwriting activity is always in the regulatory trading book.

## **Criteria #3: Equity investment in a fund (except if daily prices are not available)**

- Basel 3 LCR requires banks to maintain a liquidity buffer, a portion of which can be composed of collective investment units (CIUs). It should be made clear that assets which are invested for the purpose of the liquidity buffer are presumed to be classified as banking book.
- Equity positions in funds may be held in order to hedge synthetic short positions arising from client activity (i.e. client wishes to have long exposure to such fund). Such business is market-making/client facilitation and should not be presumed to fall in the banking book. If the trading intent and risk management criteria are satisfied, such positions should be allowed for the trading book.

## **Criteria #4: Listed equity**

- Banks often hold strategic investments that can take the form of listed shares. These are long term investments for which a trading book classification would not be suitable.
- Besides strategic or industrial investments, banks often hold participations in market infrastructures (central counterparties and exchanges) or other types of “industry” participations. We request clarification that such investments would qualify for the banking book.
- Basel 3 LCR requires maintaining a liquidity buffer, a portion of which can be composed of listed equities. We request clarification that assets that are invested for purposes of the liquidity buffer are expected to be classified as banking book.

- Frequently, trading desks make a market in equities which are listed only on market maker supported venues (e.g. pink sheets). We recommend that these also be considered for the trading book, if they are risk managed as such.
- We request clarification that open-ended mutual funds would be eligible for the trading book, if risk managed as such.

#### **Criteria #5: Naked short positions**

No comment

#### **Criteria #6: Options**

- We request that “options” should be more specifically defined. It is our understanding that the intent is to capture stand-alone derivative instruments, rather than any instrument with an embedded option, such as a mortgage with prepayment (which would result in a migration of a significant portion of the current banking book into the trading book).
  - As an illustration, collars (buy floor/sell cap, or buy cap/sell floor) and swaptions are instruments eligible for hedge accounting and should be eligible for the banking book
  - Should there remain a presumption specific to derivative options, we recommend the presumption be limited to “net sold options” for the trading book

#### **Other Comments:**

- **Internal Trades**  
Certain banking book hedges are only allowed to be recognized if they are with external counterparties.
  - With regards to market hedges, we request clarification that internal hedges would also be eligible, as long as they were designated as such at the outset. These banking book hedges should receive banking book treatment, as they are risk managed as such. The risk would also show up in the trading book for the internal trading desk and would be capitalized appropriately, as part of the trading desk portfolio.
  - With regards to credit risk and CVA hedges, understanding that it would be a departure from current rules, we also request that internal hedges be eligible hedges, as long as they were designated as such at the outset.
- **Intraday Trading.** There are multiple references to (active) intraday trading and associated measurement & reporting in the document. More clarity on what constitutes “active” intraday trading, the type and frequency of specific measurements and limits, would be helpful.
- **Repos.** We recommend that the framework specify that repos can be booked in trading book, regardless of accounting classification. This is currently an area of unnecessary international divergence. And this classification can be important because it drives eligible collateral for counterparty risk, at least under current Basel 3 framework.
- **Valuation frequency.** The proposal seems very restrictive regarding the valuation frequency required for an instrument to be eligible to the trading book. If daily valuation cannot be performed, a weekly frequency should still be considered as acceptable for certain exposures (funds with weekly NAV).
- **Switching Instruments.** We believe that the surcharge for switching instruments should be calculated under Pillar 2. In practice, moving between the regulatory books should be rare, but maintaining the documentation for the surcharge can be complicated and the process unevenly implemented across jurisdictions. For example, it is unclear how an increase in the position after the reclassification should be handled.
- **Explicit Approval.** We note that a prior approval is needed if banks have to deviate from the presumption list. This will impose a heavy documentation burden on banks, even for activities that banks only intend to maintain in the banking book (e.g. strategic investments). We recommend that a request is not deemed to be necessary if the strategy for the holdings is included in banks defined policies and procedures and/or if the activity is part of the explicitly permitted deviations from the presumption list (as defined and listed in the rule text). As requested by the TBG, we provide in appendix 1 a sample of the most important deviations.

- **Accounting Reclassification.** We request confirmation that an accounting reclassification would be an automatic transfer rather than requiring explicit regulatory approval. One example of such would be if the default of a counterparty resulted in an accounting reclassification of a trading book derivative to a banking book claim.
- **FX and Commodity Exposures.** The proposed rules require that any FX or commodity positions held in the banking book be included in the market risk capital charges and be treated as if they were held within the trading book. We request clarification that the intent was to require market risk capital only for the FX or commodity exposure in the banking book, rather than requiring all risk factors for the position to be subject to market risk capital. Requiring all risk factors to be subject to market risk capital would potentially split hedges, to the extent the banking book position was a hedge to a banking book exposure (e.g. cross currency swaps).

In general, we would envision that the presumptive list would be periodically updated and amended. For example, as requests for exemptions from the presumptive list are considered by the various national regulators, we would recommend that there be a feedback mechanism to consider if those permitted exemptions or deviations should be formally adopted by BCBS, through an FAQ or otherwise, to ensure that acceptable exemptions and deviations remain harmonized across jurisdictions.

In closing, we would like to emphasize our support for the goal of clear standards for banking book versus trading book designation and for harmonizing the trading book or banking book designation across jurisdictions. We appreciate the opportunity to provide our input.

## 2. Model independent approval process

### Summary

The proposed Model Independent (MI) Standard is risk insensitive. A leverage ratio is an inappropriate standard for evaluating the robustness of a model of desk-level mark risk.

The proposed Model Independent (MI) Standard is flawed because the magnitude of the balance sheet assets of a trading desk, or more broadly the desk's credit Exposure, provides very little information about its market risk. The magnitude of the assets (or the Exposure) does not take into account the degree to which the market risk of the desk is reduced by offsetting trading positions that appear as balance sheet liabilities. The liabilities can hedge both directional market risk and relative value/basis risk.

A simple hypothetical example illustrates this point. Assume a desk only trades US Treasury Securities and that it hedges each long position with a short position that has essentially the same tenor, but a different coupon. A desk with many such hedged pairs, each pair with slightly different tenors and different coupons, would have very little sensitivity to changes in the level or shape of the Treasury yield curve and would have no credit spread sensitivity. Consequently the ES of the desk would be very small and so would the stress loss of the desk, for any realistic stress scenario of changes in the Treasury yield curve. Yet the magnitude of the balance sheet assets (and liabilities) of the desk could be very large because each of the securities in the hedged pair are different and cannot be netted against each other. The ratio of ES/Assets or ES/ Exposure would be an inapplicable measure of the robustness of the internal risk model used to calculate desk level ES.

In appendix 2 we give other, richer examples.

The essential problem of the proposed MI Standard is that the magnitude of the denominator of the proposed MI ratio is risk insensitive: it is not a measure of either the amount of directional market risk or the amount of relative value/basis risk on the trading desk.

A leverage ratio is an appropriate tool for measuring one aspect of the risk of a bank holding company, or a bank legal vehicle – i.e. the degree to which the legal entity funds its assets by debt rather than equity –

but it is inappropriate tool to evaluate the robustness of a bank's internal model to measure market risk at a desk level.

A better MI Standard would be risk sensitive. One risk sensitive alternative would be to measure the ratio of ES to the stress loss from an appropriately defined set of stress scenarios that included both a) directional stress shocks and b) relative value/basis stress shocks

We believe that a MI Standard must be risk sensitive, or else it will generate many false negatives – i.e. inappropriately exclude the use of market risk model for a desk. One example of a risk sensitive MI Standard would be the comparison of the ES of a desk to the stress loss on the desk conditional on a set of appropriately defined stress scenarios. Each appropriately defined stress scenario should be a combination of a stress of directional market risk and a stress of the relative value/basis risk of the desk, as described in more detail in appendix 2.

We think that an appropriate MI Standard would measure the average of the ratio of (ES/Stress Loss) over a specified period (e.g. the ratio could be calculated daily or weekly and averaged over one quarter).

We propose that a desk, which passes all other criteria for using an internal model, but fails the Stress Test Standard (as defined herein), should have its regulatory capital defined by its stress loss rather than by the standardized approach.

An appropriately defined MI Standard must be defined in the context of other limits

We think that an appropriately defined MI standard must be defined in the context of the existing limits of the bank.

Each bank, as required by the BCBS's own rules, must have limits on the market risk of each trading desk. This should include limits on both directional market risk and limits on relative value/basis risk.

In addition, each bank will be subject to a BCBS defined Large Exposure limit, which will limit the bank's total exposure to an obligor as a percent of its regulatory defined capital. A bank's total exposure to an obligor will include credit risk arising from all sources, including the a) issuer risk of trading positions (i.e. from debt and equity securities), b) counterparty credit risk, c) loans, d) AFS positions, etc.

A bank's policy on trading limits typically includes a process for obtaining an approval from an appropriate level of risk management to allow a limit exception, within a defined range, on a temporary basis. Correspondingly, we think that a comparison of ES to stress losses should be based on an average of the ratio over a defined period (such as a quarter), as described above to avoid noise that could result from a single day risk limit exception..

## Defining Stress Scenarios

The potential stress loss of a trading desk can be ascertained by two types of stress scenarios: directional stress scenarios and relative value/basis risk stress scenario. These scenarios can be specified by historical events and by hypothetical future events that have the potential to cause large losses. We think the industry needs to work with the BCBS to define suitable stress scenarios and that the suitability of stress scenarios needs to be continually reviewed.

### Directional Stress Scenarios

Directional stress scenario to test desk internal models should be made in the context that trading desks have limits on all market factors and that the firm as a whole is subject to large exposure limits to individual obligors (e.g. corporations, financial institutions, sovereigns). Consequently, directional stress scenarios only need to entail large correlated changes in each type of market factor – i.e. systemic stress scenarios of general market factors (e.g. all equity prices in a country), rather than stresses of idiosyncratic market factors – i.e. a stress shock of a single equity price..

A preliminary definition of directional stress scenarios would entail large correlated changes in market factors within each asset class:

- a) Stress change (increase or decrease) in the level and shape of sovereign yield curves
- b) Stress widening or narrowing of all credit spreads, including the spread between the sovereign yield and LIBOR/OSI.
- c) Stress increase or decrease in the value of a base currency (e.g. the USD) relative to other currencies
- d) Stress increase or decrease in equity prices
- e) Stress increase or decrease in commodity and energy prices.

The actual risk of a trading desk will be determined by the magnitude of the change in market factors over the time required to hedge or liquidate an open risk position. Experience and common sense argues that trading liquidity of debt securities will likely be reduced during an economic crisis when all credit spreads are widening. Similarly, trading liquidity may be reduced for equities when all equity prices are falling.

However, trading liquidity is very unlikely to dry up when the converse occurs – i.e. when debt and equity securities increase in value over a sustained period of time. More generally, all else held constant, the solvency of a bank is unlikely to be under strain when the economy is growing, loan losses are low, and debt and equity securities are increasing in value. Consequently, directional stress scenarios to test internal models need only include scenarios in which credit spreads widen and equity prices fall.

In contrast, depending on the specific nature of the economic crisis (e.g. inflationary or deflation crisis) the level and shape of the sovereign yield curve, the value of the base currency against other currencies, and the level of commodity and energy prices could either increase or decrease during systemic stress scenario.

Consequently a realistic directional stress scenario would be defined by:

- a) Stress increase or decrease in the level and shape of sovereign yield curves
- b) Stress widening of all credit spreads, including the spread between the sovereign yield and LIBOR/OSI.
- c) Stress increase or decrease in the value of a base currency (e.g. the USD) relative to other currencies
- d) Stress decrease in equity prices
- e) Stress increase or decrease in commodity and energy prices.

We think one set of realistic directional stress scenarios are the ones associated with historical crisis, in which the stability of financial institutions were at potential risk. Historical examples of such directional stress scenarios would include full year changes in market factors observed during 1974 (inflationary), 2008 (deflationary), and more narrowly, the 2012 (Eurozone sovereign debt crisis). Hypothetical stress scenarios should also be considered if there are directional risks not captured by historical stress scenarios.

#### Relative Value/Basis Risk Stress Scenarios

Relative value risk arises when a bank buys asset A and sells asset B in the expectation that the ratio of the prices of A/B will increase. A loss will occur if the ratio of prices falls. The relative value positions will have no change in value if the price of A and B increased or decreased by the same percentage, as would occur if A and B were in the same asset class and had the same sensitivities to the same general market factors.

A portfolio of relative value positions can experience a large loss if many market financial institutions hold similar relative value positions and try to unwind them at the same time. This has occurred in the past, for example during the Russia/LTCM crisis in 1998 and for some banks and hedge funds during the summer of 2008.

Basis risk arises when a firm hedges a position in one asset with a short position in another asset to which it normally is highly correlated – e.g. a portfolio that was long heating oil and short crude oil. Such a portfolio might have little or no change in value if all energy prices increased, or decreased, but could have a large loss if the ratio of the price of heating oil to crude oil fell.

Stress tests for basis risk have to be specific to the composition of the positions on a trading desk. They can be identified either mechanically, by a risk report that captured and highlighted large basis risk, or they can be identified and specified by an independent risk manager. The appropriateness and robustness of relative value/basis risk stress scenarios would have to be evaluated by the bank's supervisors. These stress scenarios will likely be a mixture of historical relative value/basis risk scenarios and hypothetical scenarios. The latter would have to be backward engineered to assure that any desk with a large amount of a particular basis risk had its ES tested in an appropriate manner.

### 3. Capturing market illiquidity

#### Executive Summary

- We support TBG's objectives of factoring in market liquidity and appreciate TBG's effort to balance simplicity, risk sensitivity and comparability when designing the approach.
- However, after detailed evaluation and much industry discussion, we have identified a number of gaps and complexities in the current FRTB proposal that we believe needed to be resolved before it can deliver on TBG's objectives. We discuss these issues in this paper.
- We also believe there are simpler ways to achieve TBG's objectives with less uncertainty than the approach proposed. We will go over these alternatives in this paper.
- These alternatives all share a number of common features. They are essentially variants of the same approach. They differ by how much flexibility they have incorporating granular liquidity horizons and how close they are to the current B2.5 framework. The one closest to the current framework requires the least amount of development and has less uncertainty but is more constrained on other aspects.
- One common feature is that none of these variants use overlapping long horizon returns. In the next section, we explain why the use of overlapping long horizon returns would give rise to a number of modeling/statistical issues that can introduce uncertainty to the final outcomes. Furthermore, it can be just false precision to use actual long horizon returns when they are accompanied by rather coarse liquidity horizon buckets and risk factor categories from regulatory assessments.
- Another key common feature is that they all involve scaling from simulated P&L over a common horizon (which is equivalent to scaling the final metrics in some cases) as oppose to scaling the inputs. This can avoid many issues related to correlation between returns from different horizons and better compatibility with risk sensitive measures particularly when regulatory liquidity horizons were used.
- Given the tight timeline to response, we can only deliver on the skeleton of these alternatives. We would like the opportunity to work with TBG on the details. We treasure this specially opportunity to review and strengthen the market risk framework.
- Last but not least, we want to highlight that firms always want to develop their own risk sensitive framework and, in this case, their own assessment of market liquidity as they have different business models and portfolios and have the need to manage their risk and capital accordingly. As such a regulatory capital framework that is not sufficiently risk sensitive would necessitate the maintenance of parallel systems which is far from ideal and potentially create conflict between risk and capital management.

#### Identified gaps/complexities with the FRTB proposal

- TBG's approach to factor in market liquidity has the following key elements:

- A. Define liquidity in the risk factor (RF) space as time to extinguish RF exposures via hedging or unwind
- B. Specify Liquidity horizons (LH) from 10 days to 250 days for a small number of broad RF categories based on regulatory assessment
- C. Directly apply long horizon shocks derived from overlapping long horizon RF returns instead of scaled short horizon shocks or scaled output
- While the approach is conceptually straight forward to understand, we believe, in practice, it has a lot of complexities and open issues which, if not dealt with, can undermine risk sensitivity, reduce comparability and affect feasibility over in the short run. Below are some issues we identified.

1. The use of longer, varying horizon and overlapping returns presents new modeling challenges. For instance,
  - How to model the drift (trending or mean reverting) for long horizon returns?
  - How to deal with autocorrelations arising from the use of overlapping returns?
  - How to model correlations of different horizon (and therefore partially overlapping) returns?
  - How do factor models work when risk factors have different horizons?
  - How to deal with lead-lag relationships for varying horizon returns?
  - How to model common trends / co-integration type behavior?

There are many theoretical/statistical questions to be resolved, and industry standards arrived before the framework can be implemented and deliver on risk sensitivity and comparability.

2. The categorization of risk factor is not independent of the representation/definition of risk factors.
  - E.g. we can represent two rate factors as 1 rate and 1 spread.
  - We can represent an index basis as index vs constituents.

As such, what goes to which risk factor category is not very precise yet it can make a huge difference if there is a big difference between the assigned horizons of various risk factor categories.

3. Imprecise risk factor categorization together with rough horizon bucketing can also lead to cliff effects.
  - E.g. when ratings go from BBB- to BB+, the horizon changes from 60 to 120 days meaning that the shock can go up by more than 40%! Hedge ratios and diversification effects can be greatly affected thus creating a conflict between risk and capital management - a portfolio hedge that reduces P&L volatility can lead to higher capital and vice versa.
4. While the choice of risk factor categorization and horizon bucketing has a big effect on both absolute and relative capital charge across products and can have huge effects on incentives and risk concentration, it is unclear how the current assessments were determined
  - E.g. why FX rates have longer horizons than equity prices?
  - Why DM and EM rates should have the same liquidity?
  - Why HY sovereigns are the same as IG corporates?
5. As the market environment changes and new crisis is developing, what is the mechanism to update the horizons for more appropriate weightings?
  - The market situation can change much faster than regulatory rule sets which as subject to many legal procedures.
  - Without sufficient linkage to risk measurement, there is plenty of room for setting wrong incentives and creating distortions. It is unclear what mechanism is there to monitor and correct for such distortions when they arise.
6. The use of varying and long horizon returns could present challenges translating factor shocks to P&L that needed to be resolved before the framework can be used.
  - Delta/gamma type approaches would not work well for very large shocks and therefore needed to be replaced
  - Pricing grids would need to be recalibrated to accommodate larger and a wider range of shock combinations.
  - Pricing model assumptions might need to be adjusted to allow for a broader range of input values.

- The operational challenges are much greater than that of fixed stress tests due to the large number of randomly simulated scenarios.
- 7. Data infrastructure would need to be overhauled and massive amount of data would need to be repopulated.
  - Shocks might need to be redefined (e.g. absolute or relative change) with data repopulated
  - Proxy and data-backfilling would need to be redone
  - Factor models and residuals need to be re-estimated
  - Mechanism need to be established to map risk factors to the prescribed categories.
  - Data need to be revalidated
  - Database need to be reworked for varying horizon returns while the current system is running.

## Simpler alternatives

- We present below a number of alternatives that we believe are simpler than the proposed approach but of varying degree. We start off with the one closest to the current B2.5 framework and move to approaches that offer more flexibilities but with more complexities.

### Variant 1: liquidity addon

- Currently, under B2.5, a 10 day 99% VaR is used with a 3 multiplier which effectively converges the 10 day VaR into a 90 day VaR
- With the 97.5% ES comparable to the 99% VaR, we could start with a 90 day 97.5% ES with no multiplier as the base case or a 10-day 97.5% ES with a 3 multiplier with all risk factors.
- If we were to follow the risk factor categories in FRTB2, there are only a few of them that has a horizon longer than 90 days. Specifically,
  1. corporate HY credit
  2. equity small cap vol
  3. equity other (e.g. equity structure products)
  4. non-energy and non-precious metal commodities vol
  5. commodities other (exotics)
  6. credit structured products
  7. credit other

The RF categories 1-5 above have a 120 day horizon. The RF categories 6 and 7 have a 250 day horizon.

- With this setup, we can add to the 3 times 10-day ES (~90-day ES) a number of standalone ES add-ons, one for each of the set of categories that is longer than 90 days, representing the additional holding period over and above 90 days. Note that the illiquid risk factors are also included in the base firmwide 3 times 10 day ES.
- The firmwide liquidity adjusted ES is equal to:
 
$$[\text{FW LaES}] = 3 * [\text{FW 10-day ES}] + \text{DB} * \text{addon}$$
 Where,
  - $\text{addon} = \text{Sum} \{ 3 * [\text{Category } j \text{ 10-day ES}] * W_j; j=1, \dots, 7 \}$
  - $W_j = (\text{sqrt}(H_j/90) - 1)$ ,  $H_j$  is the horizon of RF category  $j$  in number of day
  - DB is a parameter between 0 and 1 representing any diversification benefit allowed. DB=1 means no diversification benefit.
- [Category  $j$  10-day ES] can be calculated as a risk factor based ES by only shocking the risk factors identified with category  $j$ . However, given the liquidity categorization in FRTB2, we believe it is better to calculate the addon as the ES of desks/segregated accounts with products having exposures to risk factors in category  $j$  as well as their hedges. Even though the liquid hedges (e.g. index hedges) can be unwound much faster, in practice they will only be unwind together with what they are hedging.
- The equation above also made it clear that while there might still be a multiplier on the FW liquidity adjusted ES (FW LaES) to account for model performance based on backtesting, there is

no reason for this multiplier to be subjected to a minimum value of 3 as it is already accounted for in the first component on the right hand side of the equation representing a common 3 times 10-day ES (or 90-day ES). Having yet other 3 multiplier on top of it is a double count.

- This liquidity add-on approach kept the essence of the TBG objective of penalizing illiquid risk factors by having an add-on to capture the extra risk of those risk factors with a longer horizon than the standard horizon for the more liquid factors.
- It keeps all liquid factors under the same horizon without further distinguishing liquid risk factors with varying horizons that are below 90-days. From that perspective, it takes an approach that focus on a number of risk factors that we particularly worry about their liquidity over a stressed period rather than attempting to have a view on the liquidity of every risk factor – which is a much more difficult task.
- It fully recognizes hedging and diversification based on consistent correlations among returns of the same horizons.
- It capture the additional risk of longer (than standard) horizon by scaling. Any additional precision from using actual long horizon return is small compared to the relatively imprecise horizons.
- It does not further attempt to correlate the returns of the less liquid risk factors beyond 90-days. The approach avoided the complexity of correlation between returns of different horizons. Some degrees of hedging and diversification benefits between the liquid and illiquid risk factors are already reflected in the 3 times 10-day ES. Other than that, the add-on is “added” to the 3 times 10-day ES. An alternative way under the assumption that non-overlapping period are uncorrelated, then perhaps the add-on can be added in a square-root of sum-of squared way.

### **Variant 2: cascade of non-overlapping periods**

- This variant extend the first to cover a broader range of distinct liquidity horizons (including those of the relatively more liquid risk factors) yet avoid the issues of correlations between long and short horizon returns. This is done by having a cascade of non-overlapping period ES's which under the assumption of zero correlation across non-overlapping periods would mean that these ES's can be aggregated using a square-root of sum of squares calculation. (Variant 1 is essentially a cascade of only 2).
- The idea is that if we have a range of liquidity horizons:  $[H1 < H2 < H3 < \dots < Hn]$ , then one can represent them as a number of non-overlapping periods. Specifically, time 0 to time  $H1$ ,  $H1$  to  $H2$ ,  $H2$  to  $H3$ , etc. with corresponding length,  $H1$ ,  $H2-H1$ ,  $H3-H2$ , etc.
- In the first non-overlapping period from 0 to  $H1$ , the portfolio will contains all risk factors as none has been extinct. In the 2<sup>nd</sup> period from  $H1$  to  $H2$ , the portfolio will only contain risk factors with horizon longer than  $H1$ . In the 3<sup>rd</sup> period from  $H2$  to  $H3$ , the portfolio will only contains risk factors with a horizon longer than  $H2$ , and so on and so forth. If  $V1(0,H1)$ ,  $V1(H1,H2)$ ,  $V1(H2,H3)$ ,... are the 1-day variance (we can start with 10-day instead) of each of these portfolios respectively, then the relevant variance over each of the non-overlapping period by scaling are  $V1(0,H1)*H1$ ,  $V1(H1,H2)*(H2-H1)$ ,  $V1(H2,H3)*(H3-H1)$  etc. so the overall standard deviation can be calculated as the square-root of the sum of the variances:  

$$\text{sqrt}[ V1(0,H1)*H1 + V1(H1,H2)*(H2-H1) + V1(H2,H3)*(H3-H1), \dots ]$$
- The idea is that we would apply the same in the expected shortfall space to calculate the expected shortfall as the square-root of the sum of squares of the ES's for the sequence of portfolios reflecting the sequence of risk factor extinction over time.
- This approach address issues with correlations between long and short horizon returns by defining a sequence of non-overlapping periods.
- It is more general than variant 1 (which can be viewed as a special case). It distinguishes all the liquidity buckets in the FRTB proposal. However it is more complicated as it requires the creation of portfolios of distinct horizons.
- Furthermore, if there is a large number of liquidity horizon buckets, then this would entail the creation of a large number of portfolios with distinct horizons.

### **Variant 3: A business level P&L scaling approach**

- This variant does not require the creation of portfolios with distinct horizons but require the scaling simulated P&L vectors directly. While variant 1 and 2 can also utilize the scaling of P&L vectors, they can be performed by scaling from short horizon ES metrics.
- The idea is to apply the weighting (time scaling) directly on a baseline simulated short horizon (e.g. 1-day or 10-day) P&L at a desk or business activities level and then obtain the firmwide P&L simply by summing the horizon scaled desk or business level P&L's.
- This would provide a better linkage between capital measurement and desk level risk measurement while respecting hedge relationships within a desk based on one single horizon which can help reduce uncertainty.  

$$[\text{FW P\&L vector}] = \text{Sum}\{ [\text{desl } j \text{ P\&L vector}] * \sqrt{H_j}; j=1, \dots, N\}$$
- With the horizon scaled simulated P&L vector at the firmwide level, we can obtain the corresponding the 97.5% ES directly from the tail scenarios.
- The appeal of this approach is that it is more direct and transparent. The liquidity horizon scaling is equivalent to scaling up positions size to reflect the higher risk due to illiquidity. It does not involve actual horizon returns. As such, while the different P&L's carry the interpretation of horizon P&L's, that are really just scaled from consistent short horizon P&L's. There is no real aggregation of P&L's from different horizon returns and the problems that come with it.
- By scaling from the same short horizon return, the approach essentially adopt the same short horizon correlations everywhere. In other words, the correlation between long and short horizon returns is assumed to equal the correlation between short horizon returns.
- We do not think that is a drawback as the correlation between long and short horizon returns tend to be rather unstable and often run into insufficient data problem.
- The key issue of this approach is how to determine the liquidity horizon of a desk/business. To avoid comparability issues, one possibility is to stay at a very high level – e.g. only having 5 businesses defined as collection of desks corresponding to the typical 5 product categories in financial reporting – FX, EQ, IR, CR, CM. This would greatly simplify things but do go against a more granular bucketing / categorization that is in the FRTB2 proposal.
- One method is to calculate a weighted average horizon per desk based on the factor weights in the desk and the regulatory horizons of the factors. The factor weights can be factor level ES. Alternatively, one can create a statistical index to represent the liquidity of a portfolio. We are in the process of exploring/testing these options.

## 4. Treatment of Credit

### Strengths of second Consultative Paper proposals

- Migration risk will be captured in stressed ESF and removed from IDR. This removes a potential double count and simplifies the default risk measure.
- Allowance to account to for overlap in IDR of risk already captured in the ES price risk model.
- While not clear yet, the move to standardization of co-dependence modeling (number of factors, calibration approach and distributional assumptions) will aid comparability.
- The removal of the constant level of risk assumption together with a 1 year uniform capital horizon is simpler, helping comparability and removing material model dependence.

### Remaining issues to address

- The definition of scope could be more direct. It reads (§186 (c)) “All positions... with the exception of those ... whose valuation depend solely on commodity prices or foreign exchange rates are subject to the default risk model”.
- The meaning of an n-factor model is not clear. The perception that more factors gives a larger result is incorrect.
- While we support zero-tolerance to any blanket “risk-free” assumption, the value of the floor must be appropriate and carefully calibrated, a floor of 3bps for local currency sovereign bonds may have a large impact on the real economy limiting the ability of firms to participate in market-making in G4 currencies. Further, it is inconsistent with;

- the Banking Book treatment, which does not have a floor for sovereigns
- discretion left to national supervisors to lower the risk weight for sovereigns under the standard approach to zero,
- the historically observation that default rates on highly rated governments is extremely low – for example, since they began rating sovereigns in 1975, S&P report<sup>2</sup> no defaults whatsoever on investment grade sovereigns, over the 1 year time horizon relevant for IRC calculation. Even over a 15 year horizon, the longest reported and far above the standard applied in IRC, no defaults at all were observed on AAA or AA rated governments. Correlation based on equity prices cannot be implemented for sovereigns, quasi-sovereigns and municipal bonds. Their use is inconsistent with AIRB.
- The mandatory inclusion of Equity positions in IDR has no clear rationale on top of raising several conceptual difficulties:
  - It is not clear what is meant by the default probability of equity. Is it the probability of a jump to zero price?
  - Does the TBG make the assumption that if a firm issues publicly rated debt, the probability of default over 1 year equals the probability of equity price going to 0 over 1 year (the Merton model would assume that)?
  - Is seems totally unrealistic to think that such equity position would be kept in the trading book over one year with no form of active management. This contradicts the fact that equities have been assigned the shortest liquidity horizon under the expected shortfall framework
  - What should the PD assumptions be for firms with loans but no publicly rated debt issuance?
  - What should the PD assumptions be for firms with no loans and no publicly rated debt issuance?

## **Counter Proposal – these points indicate the direction for debate, and leave out detail**

### **1. A scope definition wording based on default risk.**

The current definition of IDR scope is made by exception – “all positions except Commodities and FX”. We think that defining scope by inclusion is more direct and hence simpler and better for facilitating global consistency and comparability.

186. (c) – CURRENT. All positions subject to the market risk framework, with the exception of those positions subject to standardised charges or whose valuations depend solely on commodity prices or foreign exchange rates are subject to the default risk model. Therefore, sovereign exposures (including those denominated in the sovereign’s domestic currency), equity positions and defaulted debt positions must be included in the model.

186. (c) - PROPOSAL All positions subject to the market risk framework with exposure to the risk of losses due to issuer or sovereign default (with the exception of those positions subject to standardised charges) are subject to the default risk model. For example, sovereign exposures (including those denominated in the sovereign’s domestic currency), equity positions and defaulted debt positions must be included in the model.

- Prefer a small number of factors in the interests of simplicity and comparability across firms. Propose Gaussian single-factor copula as standard.
- Propose the use of the same correlations as A-IRB, which would ensure standardisation across firms and thus reduce RWA variability, and ensure consistency between the Trading Book and Banking Book.

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<sup>2</sup> See <http://www.standardandpoors.com/ratings/articles/en/us/?articleType=HTML&assetID=1245350156739>, table 19.

- Propose no floor for sovereigns to align with the banking book treatment and the standardised method, and to reflect the historic experience that default occurs extremely rarely, if ever, for the most highly rated sovereigns. As a fall back, propose a nominal 1bp PD floor for sovereigns (floor for corporates remains as 3bps).
- Propose to keep the inclusion of equity optional given the conceptual difficulties raised by such inclusion. Banks that do not opt for the inclusion shall demonstrate to their supervisor that they properly capture event risk for equity exposures in the Expected Shortfall calculation.

## 2. Correlation trading portfolio

The Committee is considering removing the Comprehensive Risk Measure (CRM) from the revised model-based approaches and moving correlation trading portfolios to the revised standard method.

While no explicit rationale is provided in BCBS 265, we understand that the Committee is concerned by the complexity inherent to correlation trading and the CRM model which aims at capturing “all price risks” of this activity at 1 year horizon and a 99.9% confidence level.

In this respect, we would like to stress the following:

- The CRM model has been implemented and validated by national supervisors in several jurisdictions and many investments have been realized to overcome the related operational issues
- The CRM model is tightly benchmarked to two regulatory metrics: a floor (equal to 8%\*standard approach) and 25 prescribed historical stress tests
- The CRM models have also been benchmarked in the context of the second phase of the SIG hypothetical portfolios exercise. We remind hereafter the main findings:
  - CTP’s Portfolios were incompletely described (with no specific description of hedge) so that variability in results is partly due to difference in the booking of positions,
  - Comparing variability on exotic products (depending on several market parameters) and those on vanilla products is not fully appropriate,
  - Nevertheless, the observed variability in results is quite equivalent between CRM and IRC: 81% vs 77% as mentioned by EBA in its report,
  - The highest variability is observed on the standard approach (floor calculation). Its revision in BCBS 236 suggests that the same type of methodologies will still form the basis of the standard method and hence we do not expect major changes in this observed pattern.
- We therefore strongly disagree with the Committee’s conclusion that the use of standard approach will “narrow variability”.

Furthermore, we would like to highlight that as opposed to complex and less liquid products such as re-securitizations or leveraged super senior tranche which are already excluded from the scope of the CRM and subject to the standard method, there is no obvious reason to establish *ex ante* that correlation trading portfolios as defined in the Basel 2.5 framework cannot meet the criteria laid down in the FRTB for the inclusion in the model-based approach. On the contrary, we believe the new framework allows assessing the eligibility and suitability based on much more objective criteria:

- Eligibility to the prudential trading book based on the way risks related to correlation trading are effectively managed
- Longer liquidity horizon can be assigned as part of the Expected Shortfall modelling
- Robust model approval process relying on P&L attribution and Backtesting at the correlation trading desk level
- Stress-tests based capital add-on for risks that could be deemed “non-modellable” such as base-correlation

Finally, while the “all-price risks” CRM might seem a complex model, we believe all the simplifications that are proposed to streamline the IRC approach and standardize some of its underpinning assumptions can also be efficiently replicated in the CRM model.

By contrast, the standard method, despite all the proposed enhancements, will never accurately capture neither the risks that are inherent to correlation trading, nor the hedges of those risks.

As a consequence, the use of the standard approach instead of the CRM could lead to undercapitalize those risks or even worse, mishedging them to avoid an excessive capital charge.

To conclude, we ask the committee to reconsider its current position on CRM removal. There is no rationale justification to such prohibition, not least based on the latest SIG benchmarking results.

The CRM could be simplified along the same lines than the IRC model and would be used in conjunction with the current prescribed stress tests and a floor based on the revised standard method and recalibrated accordingly.

At minima, and considering the fact that the standard method is unable to cope with correlation trading activities in an economic way, a grandfathering clause needs to be introduced for existing exposures at the time of implementation of the FRTB to avoid a massive and undue increase in capital requirements.

## 5. Disclosures and floors

The industry has noted that the BCBS has recently published its second report on the regulatory consistency of RWAs for market risk in the trading book, which completes the first report published in January 2013, adding more complex trading positions into the exercise.

Consistent with the findings in the January 2013 report, the results show significant variation in the outputs of market risk based regulatory capital produced by the banks' internal models. The results also show that variability typically increases for more complex positions and re-confirms the finding that differences in modeling choices are a significant driver of variation in market risk RWAs across banks.

In terms of policy recommendation, we understand that the conclusions support reform areas that are being addressed by the TBG, namely:

1. Improving public disclosure and the collection of regulatory data to aid the understanding of market risk RWAs
2. Narrowing the range of modeling choices for banks
3. Further harmonizing supervisory practices with regard to model approvals

The industry is supportive of the Committee's objectives and we believe that reliable and comparable information on risks within the banking system fosters regulators trust in the banks as well as other stakeholders' belief in efficient functioning of the markets. However, we share the concerns expressed in the BCBS's second RWA paper - "it is desirable to have some diversity in risk modelling practices; if all banks modelled in the same way, they could create additional financial instability". Therefore, we have reservations particularly on using standard approach as a floor and the Pillar III disclosure of standard approach numbers on a desk level.

In the two sections below, we discuss the standard approach as a floor and the proposed Pillar III disclosure requirements on a desk level in the context of the above BCBS objectives as well as on their own merit. We identify some adverse consequences that are apparent in certain implementation scenarios and also highlight solutions without these pitfalls that should satisfy the regulators' concerns regarding the density of internally modelled capital and comparability between institutions.

### Disclosure

The industry believes that it is not helpful if banks using internal models will be required to disclose their standard approach capital charges on a desk level, given the approximations in the revised SA and differences between banks in their desk structures. This is as it is highly likely that Pillar III standard approach disclosures will become the binding stakeholder capital metric for banks if it is mandatory and therefore there will be little incentive to further develop more robust internal models.

Also, we see downside in such closures as they may start driving the optimization of desks and the consequent capital allocation to be aligned in a way that is suboptimal from a business perspective.

If the Pillar III disclosure requirements are adopted in a way that forces banks to disclose the numbers for comparable set of desk structures across the industry, regulators are likely to end up with two prescriptive binding capital measures (the Leverage Ratio and Standard Approach) that lack risk sensitivity and thus ability to adapt to changes in economic risks. Such binding measures have unintended consequences for two reasons:

1. They will standardize risk appetites across the sector, which is likely to reduce flexibility and diversity of business models as well as increase pro-cyclicality due to the exposures and holding periods becoming much more aligned
2. Consequent misalignment of regulatory capital requirements with economic risks in the exposures will lead to suboptimal risk management practices as the standard approach capital requirement will to large extent become the binding constraint, especially in the developed markets

To avoid these adverse consequences from public disclosures on a desk level, we believe that it is essential to allow for aggregation of desks along firm specific business lines that can be different from one bank to another. Furthermore, if there is a supervisory desire to obtain more granular data for comparability reasons, this should not be a public disclosure but used for supervisory purposes only.

## **Floors to internally modeled capital**

While we recognize the regulators' concerns about internally modeled capital requirements and the desire for more comparability between risk positions across the industry, we believe that the standard approach (SA) based capital level should not be used as a direct floor to internally modeled capital. This is as application of such floors will not provide the right incentives for continuous improvement of risk models. It may also lead to transformation of risk appetite across firms in a way that substantially reduces the sensitivity of risk management practices to real economic risks of a particular trading business. This is as the SA's simplistic risk factor approach is unlikely to help identify risks that may build up outside the SA "model".

Additionally, the industry notes that using standard approach as a floor to modeled capital is closely linked with the disclosure requirements (as the disclosure is likely to make it a floor in stakeholders' eyes) and the industry believes that the use of standard approach directly as a floor will lead to similar unintended consequences as the disclosure requirements.

The industry is willing to engage with the TBG to help identify ways to reduce the variance in modelling outcomes, especially if they produce inadequately low capital levels under risk scenarios such as the recent "triple A crisis" as well as for more complex trading positions. We believe that the TBG's objectives are better achieved through model portfolio exercises in combination with harmonisation of supervisory approval practices rather than through a standard approach based floors.

## **Floors on sovereign exposures**

The industry shares the regulators' concerns on sovereign defaults and we agree that such risks should be captured in the overall prudential framework. However, we prefer to include sovereign default risks in the stress testing framework (e.g. ECB's new stress testing methodology includes stress tests on sovereign exposures) rather than through setting a floor on modelled capital that applies to all sovereign exposures, including the G-4 countries. As noted by the industry at the meeting with the TBG on 10<sup>th</sup> December, at an event of a major sovereign default, a few basis point floor will be inadequate in capitalising for such risks and therefore it is best addressed elsewhere.

In addition, we note that the BCBS's Leverage Ratio already applies a 300 bps charge (with substantially higher requirements potentially in certain jurisdictions) on all bank assets and therefore there already is a material constraint to excessive sovereign risks in the overall regulatory framework. The leverage based requirement will reduce bank sovereign debt exposures in excess of the liquidity requirements and also apply higher capital charges to these exposures when capital is reallocated along the business lines depending on the binding capital measure.

Therefore, we believe that the proposed floor for sovereign exposures in the solvency ratio framework is unnecessary and only acts as a limit to modelling freedom with punitive impact on certain sovereign

exposures, especially when funded locally in the same currency. Consequently, the industry recommends the TBG to remove the floor from the proposed trading book proposals as it is already being addressed in the wider framework.

## 6. Appendices

### Appendix 1

Most important deviations from the Trading Book/Banking Book Boundary presumption list:

Deviation	Description
Derivatives under hedge accounting	<p>Derivative instruments are in most accounting frameworks accounted for their changes in their market value through P&amp;L. When they are accounted for hedging instruments, their changes in market value are offset by the changes in values of the so-called hedged item (hedged risk component of the hedged items). In the balance sheet, the hedged item is accounted next to the hedged item (fair value hedge), or in Other Comprehensive Income (cash flow hedge, net investment hedge).</p> <p>The trading book presumption should <i>not</i> apply to derivatives <i>and</i> hedged items that are accounted for in a hedging relationship (hedge accounting).</p>
Banking book hedges not eligible to hedge accounting	<p>Examples include:</p> <ul style="list-style-type: none"> <li>• Derivatives hedging non maturing asset or liability (such as core deposits, savings accounts...), sub-libor items (such as core deposit, saving accounts, sub libor debt instrument...), equity instrument (ex: Tier two fixed rate debt)</li> <li>• Credit hedges that are not recognized for credit risk mitigation (e.g. index/single name proxy hedges)</li> <li>• Other cases where the burden to account for hedging relationship exceeds the benefit of obtaining it due to intense workload in the ongoing demonstration of the hedging effectiveness</li> </ul> <p>The trading book presumption should <i>not</i> apply to banking book hedges not eligible to hedge accounting subject to demonstrating that the derivatives mitigate risks from the banking book, and that there is no trading intent.</p>
Basel III-LCR-required liquidity buffer	<p>Basel III LCR requires maintaining a liquidity buffer with regular transactions to demonstrate market liquidity of the securities. This could lead a portion of the LCR –buffer to be accounted for Held-for-Trading even though the intent is <i>not</i> a trading intent.</p> <p>Subject to demonstrating that those securities are not held with a trading intent, are not managed together with transactions in the prudential trading book and are held primarily to build up and maintain a liquidity buffer, those assets should not be considered in the prudential trading book. This should apply to listed equities and collective investment units that are eligible to the LCR-buffer.</p>
Long term holdings in listed equity	<p>Long-term investments in listed equity are generally part of strategic participations and hold on a long term basis.</p> <p>Those exposures should not be considered in the prudential trading book.</p> <p>As pointed it out in footnote 21 of BCBS 265, equity positions arising from deferred compensation plans, convertible debt securities, loan products with interest paid in the form of “equity kickers”, equities taken as a debt previously contracted, bank-owned life insurance products, and legislated programmes should also be excluded from the market risk framework.</p>

Embedded options	<p>Most loans (including mortgages, installment loans, commercial loans...) and deposits (term deposits, savings deposits...) have early termination embedded options.</p> <p>The trading book presumption should <i>not</i> apply to those situations</p>
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## Appendix 2

### **Problems with Proposed Model Independent (MI) Standard**

In the FRTB proposal, the Model Independent Standard (MI Standard) is one of three desk-level criteria, each of which has to be met in order for a bank to use the internal model approach to calculate regulator capital for trading risk. The proposed MI Standard is:

$$\frac{Reg\ Capital}{Exposure} > Threshold$$

In the following discussion it is assumed, as per the suggestion in the FRTB, that::

- |             |   |   |
|-------------|---|---|
| – Reg Cap   | = | ES + add-ons for non-modellable risks     |
| – Exposure  | = | Same measure as in B-III Leverage Ratio   |
| – Threshold | = | Some minimum set per type of trading desk |

### **Problems Applying Proposed MI Standard To A Trading Desk Of Debt Securities**

#### **• Simple example of problem with proposed standard**

Consider a trading desk that only traded US Treasuries. Assume in this example that the desk is long Treasury securities of various tenors and coupons, and that each long position is hedged by a short position in a Treasury security that has a similar tenor but a different coupon. The long and short positions within a hedged pair could not be netted because they were different securities, although from the same issuer.

Netting would be used in calculating the balance sheet assets and liabilities only for positions in the same security. The total asset of the desk would be the sum of the market value of the net long positions in particular securities, the total liabilities of the desk would be the sum of the market value of the net short positions in particular securities.

Given the essentially linear nature of each Treasury security, the VAR or the Expected Shortfall for a simple portfolio of Treasury securities will be a function of: 1) the set of factor sensitivities to changes in the Treasury yield curve, and 2) the volatilities and correlations of changes in the Treasury yield curve.

The market factor sensitivities can be expressed in several equivalent forms:

- Factor sensitivities to +1bp increase in the Treasury yield-to-maturity over a specified set of tenors.
- Factor sensitivities to +1 bp increase in the forward Treasury rate, over a specified set of forward periods.
- Factor sensitivities to +1 bp increase in zero coupon Treasury rates, over a specified set of tenors.
- Factor sensitivities to +1 bp increase in principal components of the Treasury yield curve, for an appropriately defined set of principal components.

In our hypothetical example the VAR and ES of the Treasury trading desk could be very small, yet the amount of the balance sheet assets could be very large. The breakage in the two measures occurs

because the factor sensitivities of the trading desk, whether measured in the form of a, b, c, or d, takes into account the impact of the short Treasury positions that are hedging the long positions.

- **More general example of a trading desk of fixed income securities.**

The prior example of a trading desk that only traded US Treasury securities, illustrates why total assets (or total exposure) is a poor measure of market risk. Other examples can be created.

Consider a desk that trades USD investment grade corporate debt. Assume that each long position in corporate debt is hedged with a short position in the corporate debt of a different issuer who had the same credit rating. The market risk of each such hedged pair can be decomposed into the components of the yield curve of each security:

- a) A base yield (i.e. USD Treasury or USD LIBOR) for a specific tenor.
- b) A general spread to the base yield by risk rating and specific tenor
- c) An idiosyncratic (i.e. issuer specific) spread by issuer and tenor

For each hedged pair, the sensitivity of the position to changes in market factors a) and b) would be zero, leaving only the basis risk of the idiosyncratic spread of each issuer. A large portfolio with many such hedged pairs would have no sensitivity to change in the level or shape of the base yield curve (e.g. LIBOR or Treasury) and no sensitivity to changes in general spreads to the base yield by rating and tenor. It is important to note that the portfolio described would have no sensitivity to a dramatic widening of general credit spreads by rating and tenor.

Instead the market risk of the desk would consist of pairs of idiosyncratic spread risk by issuer and tenor. However, by its nature, idiosyncratic spread risk is specific to each issuer and in a large diversified portfolio, the total VAR or ES of that risk would tend to be small. In contrast, the total assets and total liabilities of the desk could be large.

An actual trading desk will consist of offsetting hedged pairs, as described above, as well as corporate debt positions that were hedged with offsetting Treasury positions or LIBOR interest rate rates. These latter type of hedged pairs would have no sensitivity to a change in the level or shape of the base rate but would have sensitivity to changes in general spreads (by rating and tenor) and idiosyncratic spreads (by issuer and tenor). The former would not be diversified away and would be a large contributor to the VAR or ES of the portfolio.

However the general point remains. One cannot determine the amount of market risk on the desk simply by measuring the assets (or the exposure) of the desk. Neither the assets nor the exposure determines the amount of base rate risk, the amount of general spread risk, or the amount of diversified idiosyncratic basis risk on the desk.

- **Simple example for a derivative portfolio of USD LIBOR interest rate swaps.**

Assume a bank has a large USD interest rate swap business with its end-user wholesale customers. Assume the latter are a large number of non-financial corporations, small banks, and sovereigns. Further assume that for each pay fixed swap of a specified tenor and floating rate that it transacts with one wholesale customer, the bank did an offsetting receive fixed swap of the same tenor and floating rate with a different wholesale end-user. Let us make the further (not unreasonable) assumption that each end-user did swaps in a single direction (i.e. only paid fixed or only received fixed on each swap it transacted with the bank) and that no end-user posted initial or variation margin.

The trading desk, as a consequence of doing a very large number of pairs of offsetting swaps with a large number of wholesale customers, would have virtually no market risk but potentially a lot of counterparty credit exposure to each of its wholesale end-users.

There would be very little market risk because the bank had hedged the market risk of each interest rate swap with an offsetting swap of the same tenor and floating rate. The current and potential future credit

exposure to each counterparty, however, would be large because of the unidirectional set of transactions with each counterparty.

The current exposure of a wholesale end-user could potentially be reduced by netting if the yield curve had changed over time such that some of the swaps with the end-user had a current market value that was positive and some other swaps with the end-user had a current market value that was negative. However, because we have assumed each wholesale end-user did swaps in one direction, the potential increase in the value of the swap portfolio with each end-user would not be reduced by netting.

The bank would have potential credit exposure to each wholesale end user, even though the current exposure could not increase to every end user at the same time.

Consequently the measured exposure of the trading desk (i.e. the sum of the exposure to each end-user) could be quite large even if the market risk of the desk was close to zero.

A more realistic hypothetical example would have had the bank hedging some of its market risk with other large market makers (instead of only with other wholesale end users) and would have had some of the wholesale end users entering into a mixture of pay and fixed received swaps. Nonetheless the general conclusion would still be true. The total counterparty credit exposure of the desk would not be a measure of the amount of market risk on the desk. The total exposure will always be a large number if wholesale end-users do not post margin. The total market risk potentially could be very small and could not be estimated from the size of the total credit exposure of the desk.

The simple example can be extended to any derivative portfolio with wholesale end-users who do not post margin, so long the market risk to each underlying market factor was hedged by doing a pair of offsetting derivatives with different counterparties.

**Basel Committee Consultative Document on  
fundamental review of the trading book (BCBS 265)**

**Questions for the Committee regarding securitization  
(for a conference call, to be arranged)**

The general approach

- 1) Can the Committee please provide insight into their decision to disallow the use of models for securitizations, particularly as it relates to correlation securitizations and given the significant amount of time and resources from banks and regulators alike to develop, implement and review these models? What are their largest concerns with regards to securitizations, which lead them to believe that models are inappropriate? The capital outcome of the change, which is currently unclear, and the applicability of the capital framework for traded correlation securitizations needs to be properly reviewed and assessed to ensure that this change is appropriate.
- 2) The proposed standardized approach for estimating the Credit Spread Risk (“CSR”) component (and to some extent also for General Interest Rate Risk (“GIRR”)) of securitization RWA has a number of approximations that attempt to capture portfolio diversification/ concentrations which in practice are likely to give less accurate results than can be provided by a robust internal models-based approach. Is there any scope for the retention of an internal model-based approach, at least for measuring the CSR and GIRR?
- 3) We would like better to understand how the CSR and Default Risk (“DR”) components would be determined in conjunction, and how they would be calibrated. For example, does the Committee intend that the capital requirements for the General Interest Rate Risk, Credit Spread Risk, and Default Risk be additive? If so, since the risk-weight for Default Risk can be as high as 1250%, summing may result in the total capital requirements being greater than the maximum economic loss of the securitization position. This would result in the same double and triple counting of risks that were present in Basel 2.5 which we understood the Committee is trying to avoid. This is even more concerning given that the capital requirements for securitizations are already significantly higher than if the underlying assets are held on the balance sheet. Has the Committee considered taking the “mark” on these transactions into account, to appropriately reflect the remaining risk on the transaction? Or at the very least capping the capital at the maximum economic loss?
- 4) For any capital regime imposed on trading books, simplicity is of paramount importance. This is particularly important when one considers the various proposals for the Standardised Approach in BCBS 236 for the revised RBA, particularly Alternative A.

Interaction with the new securitisation framework (Basel 236)

- 5) We do not feel able to make an informed assessment as to the overall appropriateness of the proposed approach to securitizations without knowing the detailed specification of a critical component (the default risk framework) of the wider securitisation framework (Basel 236).

Without a detailed specification of this component we struggle to see how we can perform a meaningful quantitative impact assessment. How will these Basel 265 proposals be re-calibrated to reflect the final framework under Basel 236, and when is this expected to occur?

- 6) Can the Basel Committee please discuss their approach to aligning the capital requirements for securitizations between the trading book and banking book, especially given their expressed concern about the “risk of arbitrage”? The proposed framework for trading book assets differs significantly from the methodologies proposed in BCBS 236. We would appreciate further clarity on how the two approaches will be synchronized.
- 7) More generally, has the Basel Committee performed any review or analysis as to whether the proposed standard approach in BCBS 265 produces consistent results across the trading book and the banking book for securitizations, or for other product types?

#### Definitions

- 8) General – There is limited differentiation between structured credit / correlation products and standard ABS. In addition, the definition of corporate CDOs is unclear. Is the definition intended to cover only index-based products or does it cover cash CDOs including assets such as leveraged loans?
- 9) CSR (para 119, page 70) - How is MBS defined? It is referred to as Corporate MBS. Does this refer to CMBS only or is it intended to cover RMBS? If it is intended to cover RMBS, what types (conforming, non-conforming)?
- 10) Maturity and residual maturity are considered factors which determine capital. However, it is not clear what maturity concept is meant: legal maturity? Effective maturity? Weighted average life? Correspondingly, it is not clear under what cash flow assumptions “present value” should be calculated (see page 39: “Risk weights will be applied to the present value of cash flows and reflect the credit quality, residual maturity...”). See also Question 14.

#### Modelling and bucketing

- 11) A liquidity horizon of 250-days is identified on page 16 for “Credit Spread structured (cash and CDS)” yet securitisations (including CDOs) are required to use the Standardised Approach in which the GIRR identifies no specific liquidity horizon but uses only a single set of Vertex Risk Weights. Please explain what is intended to be covered by “Credit Spread structured (cash and CDS).
- 12) CSR Weights (para 116, page 70) – Why is there no ratings differentiation within the buckets for corporate CDOs (both HG and HY)?
- 13) CSR (para 120, page 70) - Is Bucket Number 5 (Residual) too broad? The range of assets underlying securitisations is broad and will have varying degrees of liquidity and spread risk.
- 14) Default Risk (para 159, page 80) – Should there be more LGD differential within seniority buckets for differing asset classes? Recoveries can be very different for tranches defined by attachment and detachment points.
- 15) Please provide guidance regarding the definition of cashflows for the purpose of calculating GIRR and CSR for securitisation positions. What assumptions can be used for modeling cashflows on ABS, where stated maturity can be very different from expected maturity (and

generally cash flow profile) for purposes of bucketing used in the standard approach calculation? See also Question 9.

- 16) CSR (para 119, page 70) – The proposed MBS, Credit Card ABS and Residual CSR tables incorporate significant “cliffs” between BBB- and BB-rated tranches which appear to be arbitrary and excessively large. How can this be reconciled with the stated objective of BCBS 236 of reducing such “cliff effects”?
- 17) Please confirm that ABS rating tables/buckets for CSR and Default Risk RW calculations will consider sovereign rating ceilings and be adjusted accordingly, so that similarly structured transactions with similar collateral pools are not significantly differentiated.