

REPONSE TO BCBS' CONSULTATION PAPER ON THE FUNDAMENTAL REVIEW OF TRADING BOOK

# BANKS' BUSINESS MODELS WILL CHANGE

THE BANKING INDUSTRY IS ALREADY CHANGING RISK MANAGEMENT PRACTICES AND SYSTEMS IN PREPARATION FOR THE NEW TRADING BOOK APPROACH AND RISK METRICS SUGGESTED BY BCBS

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### **Foreword**

On May 3<sup>rd</sup> 2012, the Basel Committee on Banking Supervision (BCBS) published a consultative document entitled *Fundamental Review of the Trading Book* with proposals to review the market risk framework under which banks calculate their regulatory capital requirements for the trading book. This represents a major change in the way banks will be required to measure market risk going forward and comes at a time when many institutions are still struggling to implement Basel III capital rules.

Some initial measures to improve market risk were introduced in 2009 (known as "Basel 2.5") and the Basel III rules currently being implemented were focused around raising capital levels, improving counterparty credit risk and liquidity management. The BCBS recognised that these incremental changes to the market risk framework were somewhat temporary, and that a fundamental review of "what went wrong" during the financial crisis was required.

The BCBS has made proposals to review the definition of trading book versus banking book; to replace Value at Risk (VaR) with Expected Shortfall (ES) to measure market risk; to change the way risk models are calibrated; to incorporate liquidity considerations into market risk; to constrain hedging/diversification benefits; and to revise the standardised approach to create a stronger link to the internal models-based approach (IMA).

This consultation paper is based on a survey of the views and reactions of practitioners in Asia to the proposed changes. Practitioners have welcomed the review of the trading book but opinions are divided about the best way to address these issues. One thing for certain is that this overly prescriptive set of guidelines will lead to higher capital charges in the trading book and hence restrict certain activities that are key to banks' operations. Most banks are already taking steps to improve processes and upgrade systems in anticipation of the upcoming changes, but regulators in Asia are expected to have different phased approaches.

### Introduction

Asian Banker Research recently held several conversations with senior bank risk executives and the chief risk officer of a commodity exchange in Asia to assess their response to the consultation paper on the trading book and market risk treatment issued by BCBS, entitled *Fundamental Review of the Trading Book*. This consultation paper represents the views and reactions of the financial services practitioners to the proposed changes.

We sought to provide a broad range of views of domestic and international banks as well as of exchanges and asset managers.

Senior bank/financial services risk executives whom we had conversations with include:

- Ms. Betty Lau, Head, Market Risk Management, United Overseas Bank, Singapore.
- Mr. Bily Arkan, Head, Trading Risk, Bank Mandiri, Indonesia.
- Mr. Brian Lo, Head, Market and Liquidity Risk, Development Bank of Singapore, Singapore.
- Mr. Christoph Michel, Chief Risk Officer, Natixis, Asia Pacific.
- Mr. Jacob Abraham, Chief Risk Officer, Maybank, Malaysia.
- Dr. Ranjan Chakravarty, Chief Risk Officer, Singapore Mercantile Exchange, Singapore.

In addition, we held a roundtable attended by the following executives, and the general feedback from the session is also represented in this consultation paper.

- Ms. Betty Lau, Head, Market Risk Management, United Overseas Bank, Singapore.
- Mr. David Situmeang, Vice President for Operational Risk, Bank Mandiri, Indonesia.
- Ms. Doris Honold, Head, Market Risk, Standard Chartered Bank, Singapore.
- Mr. Frankie Phua, Executive Director, Risk Management, United Overseas Bank, Singapore.
- Ms. Ibu Lisana Irianiwati, Senior Vice President of Market and Operational Risk, Bank Mandiri, Indonesia.
- Ms. Kayoko Yamanishi, Senior Vice President, Risk Management Group, Development Bank of Singapore, Singapore.
- Mr. Larry Curtis, Head, Market Risk, Rates and Credit, Standard Chartered Bank, Singapore.
- Mr. Russell Chidyuasiku, Deputy Risk Officer, Singapore Mercantile Exchange, Singapore.
- Ms. Yammi Chan, Officer, Trade Repository, Hong Kong Monetary Authority, Hong Kong.

## Post-crisis Basel guidelines

The BCBS, established in 1974, was set up with the objective of increasing comprehension of core supervisory issues and enhancing the quality of worldwide banking supervision through feedback on banking supervisory matters. National regulators are expected to adhere to these regulations according to their particular circumstances.

Basel III is a global regulatory framework formulated by the BCBS, further building on the *International Convergence of Capital Measurement and Capital Standards*, better known as Basel II. This set of enhanced measures, documented in *Strengthening Resilience of the Banking Sector* was introduced in December 2009 to address the weaknesses of the banking sector and strengthen regulation, supervision and risk management in the financial industry. *The Fundamental Review of the Trading Book* is a consultation paper issued in May 2012 in addition to the Basel III guidelines to address the gaps in current regulations pertaining to market risk.

In summary, the trading book proposals include:

- Clarification of the trading book boundary, a trading evidence-based boundary or a valuationbased boundary.
- Replacement of the risk metric from VaR to the ES model as the latter better captures "tail-risk".
- Adoption of stressed calibration for both the IMA and the standardised approach to market risk.
- Incorporation of market liquidity with liquidity horizon buckets.
- Revised treatment of hedging and diversification.
- Mandate of a standardised measurement and a capital floor or surcharge for IMA banks based on the standardised approach.
- Revision of the internal models-based approach, such as eligibility of trading activities and better coverage of risk factors in models.
- Enhancement of the standardised approach by improving risk sensitivity via use of the full or partial
  risk factor approach.

The consultation period for the trading book proposals closed on September 7<sup>th</sup> 2012.

# **Key findings**

Issues discussed with Asian banks include the trading book boundary, stressed calibration of models, the proposed expected shortfall risk metric, market illiquidity, revised treatment of diversification and hedging, and the internal models-based and standardised approach to market risk. Interest rate risk in the banking book and the treatment of specific risks fundamental to market risk were also discussed although these were not included in the scope of the consultation paper. The views of participants on the various aspects of the proposed trading book and market risk regulations can be summarised as follows:

- 1. The trading evidence-based boundary is the preferred approach.
- 2. Mandatory use of the standardised approach will create disincentives for the use of an IMA.
- 3. Introduction of liquidity horizon buckets must overcome operational constraints.
- 4. Restrictions on cross-risk diversification may have a significant impact on capital requirements.
- 5. Expected shortfall measures tail-loss risk better than VaR and is already part of banks' risk tools.
- 6. Implementation across different jurisdictions will present challenges.
- 7. Overreliance on risk models is not the sole contributor to the subprime crisis.
- 8. Regulatory impact on the trading business and risk systems will change banks' business models.

## Detailed feedback from respondents

#### 1. The trading evidence-based boundary is the preferred approach

Currently, risks are treated differently in the banking and trading books depending on where financial instruments are placed. The trading evidence-based approach allows banks to justify where assets and liabilities are placed based on their intent and ability to trade, which is better aligned with how risks are currently managed.

- There is general agreement that the valuation-based approach is more straightforward and consistent with current accounting standards. However, the respondents are not decided whether it will fully accommodate their current trading business as this approach may bring more assets into the trading book which may not fall under this classification (e.g. securitised assets used for regulatory liquidity requirements). The majority feels the evidence-based approach is better able to capture trading activities as they are defined today, though the requirement to prove "trading evidence" could be onerous.
- Some bankers see the trading book boundary as a one-size-fits-all proposal, with the Basel Committee aiming to employ a single approach (either the trading evidence-based approach or the valuation-based approach) that applies to all institutions regardless of whether their core activities are in trading.
- Banks are concerned with the lack of permeability of the trading/banking book boundary. Proposals would restrict movement of assets between the trading and banking books in order to prevent regulatory arbitrage. However, respondents feel that during stressed conditions it may be this ability to move assets between trading and banking books that will allow them to better manage risks and capital requirements. Thus, they believe that the restrictions on permeability should not be strictly enforced.
- There is specific concern that the valuation-based approach will require that some assets not intended for trading be included in the trading book. For example, assets such as available-for-sale bonds that are not actively traded—thus, not priced daily—would be subject to more onerous rules and processes that include daily mark-to-market and back testing.
- Another criticism of the valuation-based approach is its negative impact on hedging and diversification. For example, fair-valued assets intended for hedging purposes would be included in the trading book while the liabilities would be left in the banking book. The fact that these assets, which are used to offset risks, are removed from the banking book will increase captured risk and subsequently capital requirements.
- The evidence-based approach is closer to the current trading book definition based on intent. Thus it will be operationally easier and more consistent with actual trading book activities to employ the evidence-based approach than the valuation-based approach. Moreover, the valuation-based boundary depends on accounting standards set by an individual country's supervisors, which may not be aligned across different jurisdictions.

# 2. Mandatory use of the standardised approach will create disincentives for the use of an IMA

The trading book proposals aim to strengthen the relationship between the standardised approach and the IMA, especially in terms of valuation. Under the new proposals, the standardised model is proposed to be mandatory and would also serve as a floor or capital surcharge for IMA banks. Bankers are wary of how these new trading book rules can potentially increase risk capital requirements as compared to the current regulations.

• Mandatory standardised approach discourages banks to adopt or improve their internal models. In effect, the new proposals would create additional work for IMA banks by imposing a secondary market risk calculation based on the standardised approach. This could lead to an abandonment of the internal model if a substantial surcharge is imposed as well as disadvantages for banks financially and operationally.

#### 3. Introduction of liquidity horizon buckets must overcome operational constraints

Liquidity horizon buckets are proposed to better address the market liquidity issue, but there are a number of concerns and challenges.

- Illiquidity in some asset classes, for example some corporate bonds, creates difficulty in pricing and computing of risk due to the lack of historical data.
- The increased number of buckets would heighten risk sensitivity but create problems with the need for finer calibration.
- With the use of liquidity horizon buckets, there may be a lack of comparable benchmark data to form yield curves.
- Liquidity horizons vary for different products and the defeasance period for all products is currently no longer than 10 days. Under the new proposals banks would be required to make market liquidity adjustments with the liquidation period varying up to a year. This lengthening of the defeasance period concerns banks as the worst loss could be five times higher for a change of period from 10 days to one year and this will significantly increase regulatory capital.

# 4. Restrictions on cross-risk diversification may have a significant impact on capital requirements

Currently, banks are allowed to calculate their own estimates of correlation for use in their internal models. Bankers raised a number of concerns related to proposed constraints on the recognition of associated diversification benefits.

Strict limitations to diversification may result in risk concentration since risks are not computed at
a portfolio level but on a stand-alone basis. Consequently this would create an increased need for
capital due to heightened risk captured.

### 5. ES measures tail-loss risk better than VaR and is already part of the banks' risk tools

The proposed ES metric aims to address the main flaw that VaR has: the inability to calculate tail-risk or extreme losses above a given confidence level. Respondents however do not agree that ES should serve as the only risk metric. As both ES and VaR are derived from the same methodology, they believe that ES should be used to complement the existing VaR metric and not to replace it entirely.

- Stressed periods are proposed to be utilised for ES. Respondents feel that there are challenges in
  defining stressed periods that are most relevant as volatile periods would vary for different products
  (e.g. SGD and yen).
- "Business is not managed based on tail-loss events." Pragmatism needs to be applied to manage extreme risk events. Businesses cannot continue if the tail-risk event is the sole factor relied upon. It is important that informed decisions are made based on discussions on the likelihood or probability of occurrence with the appropriate departments and the Asset-Liability Committee (ALCO).
- VaR should remain as the day-to-day basis for the calculation of capital requirements in the trading book. An immediate consequence of a replacement of VaR with ES would be a sharp increase in capital requirements. The imminent danger is that such a measure could directly contribute to increased systemic risk as banks are forced to sell assets or increase equity in order to adhere to stricter capital requirements by the timeline set.
- The criticisms that apply to VaR also apply to ES. The same assumptions and time series are used for both calculations and both are focused on the past rather than forward-looking.
- It is proven that at some banks substantial trading exposures are adequately covered by VaR. Scenarios analysis, stress tests, early warning limits and mitigation plans are sufficient to prevent significant losses. When limits are crossed, it is the responsibility of risk managers to exercise discretion.

#### 6. Implementation across different jurisdictions will present challenges

The proposal brings additional complexities in implementation across different jurisdictions.

- Within Asia, there are different timelines for implementation set by the national supervisors as well as different capital requirements. Banks operating in countries that have less binding requirements today, may find it more difficult to comply with the more stringent jurisdictions, i.e. Indonesia. These banks may currently adhere to lower requirements and hold lesser capital than would be required in another country with higher capital requirements.
- Proposed internal model implementation at the desk level instead of at the bank level will require
  more intensive supervision by national regulators, which may lack the experience and resources to
  do so.
- A fundamental concern is that the proposals are too prescriptive to allow for flexibility. Participants
  feel regulators should be more concerned about macro-prudential risk management than micromanaging banks.

### 7. Overreliance on risk models is not the sole contributor to the subprime crisis

The 2007 crisis revealed imperfections in the financial industry. The use of risk models is defended by most practitioners who stated that a combination of factors contributed to the crisis.

- In general, the majority of the respondents feel that models are tools for risk managers and provide
  estimates of risks. The subprime crisis was caused at its root by the complexity of financial products
  and poor lending practices.
- However, one respondent felt that naivety and incorrect interpretations of models could be blamed.
  It was the lack of counterparty risk management, audit trails, contingency planning and, very importantly, the failure to use scenario analysis and reverse stress tests that led to an inability to manage the systemic risks that were created.
- While a risk manager can provide recommendations and alert Management to flagged trades, concentration risk, limit breaches, etc., execution still depends on the Management. Risk models can highlight risks but they are pointless if action is not taken by Management.
- There is an overreliance on models and technology to the point of replacing common sense. To that end, models can provide a false sense of security. For example, during the crisis the VaR model computed risk numbers that were grossly low for mortgage-backed securities (MBS). Bank managers relied on these figures and underestimated the level of risk that they were exposed to. Rules for managing risk should become more heuristic while reliance on quantitative models should be reduced.

# 8. Regulatory impact on the trading business and risk systems will change banks' business models

While the guidelines are still at a proposal stage, banks are already making enhancements to their risk management practices and systems based on the direction that Basel is heading, i.e. calculating regulatory requirements under the standardised approach and introducing more granularity in stress-testing and scenario-planning.

- Banks will require substantial changes to risk systems that impact not only programming and modelling, but also their application at the desk level. A big consideration is liquidity, for example, different liquidity horizons will require more drastic system changes to factor in different defeasance periods for assets and liabilities.
- More resources and employee training will be needed for the implementation of the proposals.
   Meanwhile a greater appreciation of the need for efficient use of capital will likely evolve. These can potentially impact on banks' business models.
- Respondents are tracking international feedback so that they are kept abreast of possible regulatory directions to ensure internal preparedness.

### Conclusion

- Implementation details of the new trading book regime may not be available for some time as the consultation period by the BCBS has just ended. The Committee will be conducting further Quantitative Impact Studies (QIS) to understand the effect of the additional requirements. The industry expects further consultation on other issues such as treatment of interest rate risk and specific risks.
- Nevertheless, what is clear is that the standardised approach will continue to be widely used. More advanced and granular stress testing and the need to develop more robust stress scenarios will be required.
   Banks are already taking steps to improve processes.
- Practitioners recognise that opinions about the best way to address issues arising from the trading book
  proposals are divided. There is concern that overly prescriptive guidelines will lead to higher upfront
  capital costs that will restrict certain key activities. Regulators such as Monetary Authority of Singapore
  (MAS) have also warned that over regulation may stifle both the role of commercial banks and the development of financial markets.
- Given past experience with Asian regulators, a sensible and phased approach is likely. There is no rush to change the existing rules until more certainty comes from BCBS.

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