AUSTRALIAN BANKERS' ASSOCIATION INC.

Aidan O'Shaughnessy
Policy Director, Industry Policy

AUSTRALIAN BANKERS' ASSOCIATION INC.
Level 3, 56 Pitt Street, Sydney NSW 2000
p. +61 (0)2 8298 0408 **f.** +61 (0)2 8298 0402

www.bankers.asn.au

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Bank for International Settlements
Centralbahnplatz 2
4051 Basel
Switzerland
Note: uploaded via *www.bis.org*

Dear Sir/Madam,

Basel Committee on Banking Supervision: Consultative Document: *Fundamental review of the trading book: outstanding issues*

The Australian Bankers' Association (**ABA**) on behalf of its members appreciates the opportunity to comment on the Consultative Document: *Fundamental review of the trading book: outstanding issues* (**CP3**).

With the active participation of our member banks in Australia, the ABA provides analysis, advice and advocacy for the banking industry and contributes to the development of public policy on banking and other financial services.

The ABA works with government, regulators and other stakeholders to improve public awareness and understanding of the industry's contribution to the economy and to ensure Australia's banking customers continue to benefit from a stable, competitive and accessible banking industry.

Overview

The ABA supports the objective of developing a stronger capital framework for market risk and recognise efforts in CP3 to enhance the risk sensitivity in its proposed approach.

We welcome the adoption of the sensitivities-based approach (**SBA**) rather than the cashflow-based approach, which presented considerable data and operational challenges. Similarly, we welcome the scaled approach to liquidity horizon modelling that is conceptually simpler and more workable than the previous proposal.

Key issues and recommendations:

1. **Internal risk transfers (IRTs)**: The proposals on IRTs may significantly limit the ability to effectively hedge banking book risk because it is often not feasible to exactly match risk transfers 1-for-1 in the external market given constraints in market liquidity and depth.

   We recommend that banks should be allowed to continue to apply risk transfers from the banking book to the trading book and manage the risk on a portfolio basis to support more effective risk management.

2. **Standardised approach**: While based on simple principles, the add-ons applied to the standardised approach to improve its risk sensitivity have created a very large degree of complexity in terms of methodology and operational requirements. These issues are likely to pose significant challenges, particularly for smaller banks.

   We recommend that, where possible, efforts should be made to simplify the proposed approach – possible approaches are presented below.

   Internal models approach: The scaled approach to liquidity horizons presents a considerable computational burden, where up to 90 full simulations will be required for each daily run.

   We propose that further efforts be made to simplify the liquidity horizon approach, for example by applying a more direct differential treatment of liquid and illiquid risk factors.

   Non-modellable risk factors: The current proposals on non-modellable risk factors present considerable limitations on widely used end-of-day data (for example, consensus data from MarkIT) and modelling practices that are currently accepted by industry and regulators, which may lead to a large proportion of factors deemed non-modellable.

   We recommend that the framework allow for the continued use of such data, provided it meets minimum requirements on the number of observations during trading days and data verification.

   Capital impacts: While several key parameters are yet to be defined, we remain concerned that the new methodology will result in a material increase in capital requirements. Our expectation is that the standardised approach is likely to become a de-facto minimum for the external market, particularly if it defines a capital floor. This outcome will raise issues regarding the real benefits of continuing to run internal models relative to the costs involved.

   We propose that these issues should be taken into consideration in the final calibration of parameters to support the ongoing viability of internal modelling and avoid unintended consequences on market operations.

The remainder of this submission responds to the questions posed under each of the three major sections of CP3. For ease of reference we have used the descriptive headings from CP3. The ABA also takes the opportunity to include a number of suggestions where some additional clarification and guidance in regards to the trading book could be considered.

1. Internal risk transfers (IRTs) between the banking book and the trading book

Q1. Views on specific refinements

We support the objective of enhancing the consistency of the trading book / banking book boundary and reducing the possibility of arbitrage between the banking book and the trading book.

The proposed treatment of IRTs would require a substantial restructuring of banking book hedging and may result in a significant increase in risk in terms of unhedged banking book exposure.

IRTs from the banking book to the trading book are a key element of banking book risk management. However, the proposed requirement to engage in an external transaction that exactly matches the IRT for equity risk, credit risk and generalised interest rate risk (**GIRR**) poses significant issues for banking book hedging, which may severely limit the ability to hedge banking book-related risk effectively.

Currently, banks may apply IRTs from the banking book to the trading book to manage their banking book hedging requirements more efficiently. The proposed requirement to exactly match IRTs with external hedging is often not feasible where there is variable market liquidity and depth, which limits the ability to construct perfect hedges on a back-to-back basis all the time. Therefore, an approach that allows risks to be managed on a portfolio basis in the trading book, allowing for temporary warehousing of risk as required, provides the opportunity for optimal risk management outcomes.

For example, banks' offshore term funding gives rise to cross-currency swap requirements that at the time of issue may not be possible to be matched exactly on a 1-for-1 basis at a manageable price given the volumes and specifics of each deal. The ability to dynamically hedge balance sheets 1-for-1 would also be limited where a bank's loan book is predominantly based on floating rather than fixed rates, which is the case in Australia where the majority of the mortgage market is on a variable rate basis. In these cases, banks may warehouse the risk in the trading book, while holding commensurate regulatory capital, until there is an appropriate opportunity in the market to close out the risk.

Any residual market risk is captured in regulatory capital requirements regardless of whether it is in the trading book (via traded market risk capital) or banking book (via the Pillar 1 capital charge for interest rate risk in the banking book (**RRBB**) in Australia).

Q2. Balance of simplicity, comparability and risk sensitivity

The proposed requirement will introduce significant complexity to the structure and operations of banking book hedging activities and is likely to significantly restrict banks' ability to effectively manage the risk.

Recommendations

1. We support the proposal to allow risk to be transferred and managed in the trading book.
2. We propose that banks consider their banking books and trading books separately for risk management but should continue to be permitted to manage their hedges on a holistic portfolio basis by passing banking book hedges to the trading book to manage and off-lay the risk.
3. We believe that the risk of arbitrage between the trading book and banking book would be adequately addressed by:
    - Strengthening the trading book / banking book boundary;
    - Strengthening the IRT process; for example, improved documentation and governance; and
    - Defining adequate and consistent regulatory capital coverage of the trading book and banking book, with restrictions on the ability to make arbitrage gains from moving exposures.

4. We propose that these issues may be effectively addressed by applying a consistent approach to traded market risk and IRRBB across jurisdictions as part of the regulatory reviews currently in progress.

2. The revised standardised approach for market risk

Q1. Views on specific refinements

2.1. Key features of the standardised approach

In regards to the shift to the sensitivity-based approach (**SBA**). The ABA supports the shift away from the cash-flow based approach (which presented considerable challenges in terms of complex new data and system requirements), to the SBA, which allows the use of existing sensitivities. However, the ABA remains concerned about the overall complexity of the SBA approach, which will also require significant resources to implement.

2.2. Treatment of basis risk

2.2.1 Correlation scaling

We support the correlation approach in favour of the disallowance approach. However, the asymmetric correlation matrix format (one for same-sign and one for opposite-sign matrices) poses significant conceptual issues with respect to the coherence of the resulting overall correlation structure.

Our concerns regarding potential excessive conservatism of the overall correlation approach are discussed below.

2.2.2 Disallowance factor

A fixed disallowance factor that limits the level of netting offset can result in a significant increase in capital and produce outcomes that are not risk sensitive when the volume of the gross positions before netting is large even though the fully netted position is small. For desks that are hedged, this treatment produces results that are multiple times higher than the internal model results. This approach is limited in terms of both risk sensitivity and comparability given that desks with minimal market risk show disproportionately large capital, and widely different market risk positions could give the same capital result.

2.3. Treatment of curvature risk

The requirement to apply full revaluation for the specified shocks introduces a considerable operational and data burden that goes against the concept of leveraging existing sensitivities for the SBA.

The application of 'parallel shifts' for curve-style risk factors needs to be clarified, including consistency with the delta component. For example, how should the parallel shocks be applied in a multi-curve environment i.e. should all curves be shifted simultaneously or should each curve be shifted individually?

Additionally, it is not clear why the curvature correlations are the square of the delta correlation parameters. Further, the curvature correlation parameters for curve-style risks need to be respecified without the tenor dimension.

Absolute down shocks may result in negative rates for curves with a low starting point. Additionally, curve shocks for curves already in negative territory also need to be considered to ensure consistent treatment across firms.

Decomposing foreign exchange (**FX**) cross-rates into two components referencing the reporting currency may result in double-counting the capital requirement and introduces additional complexity and the risk of inconsistency in application.

The ABA proposes that the treatment of curvature can be simplified, for example by estimating delta and curvature on a combined basis rather than on an individual basis. We also recommend that a materiality threshold should be applied to curvature such that smaller banks and those that do not have material non-linear risk may be exempt from this requirement.

2.4. Treatment of vega risk

The revised vega proposal is excessively complex in terms of the specified dimensions such as six levels of moneyness.

It is not clear how delta and vega should be aggregated under the proposal to calculate them on a combined basis. If the proposed method requires construction of a 2n x 2n combined correlation matrix for delta and vega, the calculation becomes significantly onerous.

The ABA would welcome further clarification on the rationale for liquidity scaling of vega risk, which may result in a significant increase in capital particularly when combined with the increase in risk weight to 55%.

2.6. Risk factor definitions

While the ABA recognises the trade-off between granularity of risk factors and simplicity, there is a concern that broad categorisations in the methodology will result in less risk sensitive capital outcomes which are not reflective of the true level of risk, The buckets proposed for risk factors within each main asset class (i.e. equity, commodities, interest rates, FX, credit spreads) are very broad, for instance:

- the risk weights for equities are the same across all emerging markets (for a given size/sector);
- all electricity risk factors have risk weight of 45% but historical data shows that volatilities are very different for off-peak vs. peak vs. base-load power;
- volatilities are generally higher for spot commodities and short dated commodity futures, compared to longer dated futures, for example, 1-month vs 1-year US Henry Hub natural gas; and
- there are very large differences in the correlations allowed between two long assets and a long/short spread in the same two assets. For instance, positions of the same sign in natural gas attract a 95% correlation, but positions of different signs attract a 30% correlation when historical correlations are typically in the range of 90% - 99+%.

The ABA recommends that risk factor definitions should be reviewed as part of the QIS process to ensure appropriate homogeneity of categories.

Interest rate risk:

- We support the inclusion of multiple curves as risk factors. However, the requirement to use 'market rates' and not 'zero coupon rates' to construct the risk-free curve represents a significant limitation to current practice. The ABA recommends that banks should be given the option of using zero coupon rates constructed from end-of-day data sources.

Equity risk:

- The inclusion of dividend forecasts and repo as risk factors for equity risk adds significant complexity to data and calculation processes. In particular, the requirement to calculate curvature for these additional risk factors represents a significant burden relative to the complexity of the calculation and the materiality of these risk factors.
- Having cut-offs between small vs. large cap stocks (for liquidity horizons in internal method and equity risk in standard method) can produce excessively unstable risk measurements for assets near to the cut-off. As the cut-off is in USD in the standard method, the equity risk for a stock depends on foreign exchange movements. The instability of risk measures is even more significant given the need to decompose index positions into constituents.

FX risk:

- It is not clear how the maturity bands specified for FX risk should be applied, since FX risk is typically considered to be a spot risk. For example, in the case of cross-currency swaps, the interest rate and cross-currency basis risks of the position may be captured as interest rate risk, while FX risk is captured on a spot basis; therefore, the maturity dimension of FX is unnecessary and may result in double-counting the risk.

2.7. Calibration of the approach

In regards to Credit spread risk (**CSR**) non-securitisations. The prescribed absolute risk weights, such as 250bps for Investment-Grade Sovereigns and 500bps for government-backed financials, appear to be excessive and are likely to result in double-counting the risk when combined with Jump-to-Default risk.

While recognising that standardised approach parameters have been calibrated to stressed periods, there appears to be significant conservatism in the shocks specified. We recommend that final calibration also take into account potential double-counting of factors such as Jump-to-Default risk. Appropriate calibration is particularly important if the standardised approach defines a floor to internal model capital.

2.8. Treatment of indices

The "look-through" approach requires indices to be decomposed into individual constituents. This treatment would appear to be overly conservative in the light of both modern portfolio theory and known market behaviour. For example, in almost all markets, indices are observed to have much higher liquidity than their constituents and the volatility of an index is typically low compared with the volatility of its constituents due to diversification

The requirement to apply a look-through treatment to indices for curvature and vega risk presents an additional significant computational burden, particularly when combined with asymmetric correlations and correlation scaling for basis risk.

Q2. Balance of simplicity, comparability and risk sensitivity

We support the objective of improving the risk sensitivity of the SBA, particularly as it is likely to play a more critical role than the internal model approach (**IMA**) in driving capital requirements given regulatory developments such as the introduction of standardised capital floors and mandatory disclosure of standardised outputs.

However, the ABA remains concerned that the overall SBA methodology is excessively complex, particularly for smaller banks and as a fall-back to the IMA.

The complexity of the SBA arises from factors such as:

- The amount and complexity of specific rules and parameters to be applied by risk factor and by asset class for calculating and aggregating impacts;
- The requirement for full revaluation of specified shocks to calculate curvature;
- The requirement to apply curvature and vega across all risk factors within all asset classes, such as dividend forecasts for equity risk; and
- The requirement to apply a look-through approach to indices to calculate curvature and vega risk.

This level of complexity creates significant issues in terms of:

- Data sourcing, transformation and storage;
- Computational requirements;
- Ongoing maintenance and validation;
- Interpreting and communicating outcomes; and
- Identifying and addressing modelling issues.

With respect to risk sensitivity, another key concern is that there appear to be layers of conservatism built upon each other, which may result in an overall excessive and uncertain conservatism of the SBA. For example, asymmetric correlations are used to account for instability in correlations, and are then combined with correlation scaling to account for basis risk.

With respect to comparability, while the increase in prescribed global rules should conceptually improve comparability, it is unclear whether reliable conclusions can be drawn from comparisons across different banks in different jurisdictions given the complexity of the rules and given differences in market environments across jurisdictions (for example, the specified shocks may have very different outcomes depending on the current rates).

Clear and consistent treatment of the trading book / banking book boundary and consistent treatment of IRRBB across jurisdictions may support further comparability.

3. Incorporating the risk of market illiquidity in the internal models approach

Q1. Views on specific refinements

3.2. Revisions to the internal models approach with varying liquidity horizons

3.2.1 Scaled liquidity horizons

A method involving the scaling of liquidity horizons is a significant improvement on the previous overlapping modelled horizons, which had the potential to produce less risk sensitive outcomes by increasing correlations.

However, in terms of risk sensitivity, the scaled approximation to calculate longer liquidity horizons (by using square root of time) can result in punitive capital for certain risk factors compared to historical experience. This will especially be the case for any margins, spreads, or implied volatilities which fluctuate within a typical range (and are floored at zero in many cases).

From an operational perspective, while the scaled liquidity horizon approach is conceptually simpler than the previous proposal, it introduces significant complexity and computational burden.

In particular, any bank running full revaluation models (the preferred option of the Basel committee) must run somewhere between 50-90 full simulations (depending on the complexity of the bank's risk factors) once the permutations of liquidity horizon, risk factor class, stressed period, current period and full and

partial risk factors are taken into account. This would be a 4-5 fold increase in calculations from the current simulation requirements.

Multiple runs also present considerably more room for operational errors and create significant issues for identifying issues in the computation process.

We propose that the Committee consider means of simplifying this calculation in a way that would allow the running of some of these factors independently.

Efforts to reduce the number of liquidity horizons at both the long end and short end, while maintaining a suitable level of risk sensitivity, would assist in simplifying the methodology and computation process. The assignment of very long liquidity horizons to certain risk factors suggests that these factors may warrant overall reconsideration of their suitability for internal modelling.

Finally, currently, the rules specify a discrete list of FX pairs as 'liquid currency pairs'. The only FX crosses vs AUD considered as liquid currencies are USD/AUD and JPY/AUD. We recommend that all cross rates where both currencies have been classified as liquid against the USD should also be categorised as liquid currency pairs. For example, market risk exposure to GBP/AUD can, and usually would, be exactly hedged using two spot transaction in USD/AUD and USD/GBP so it is the liquidity of these rates which determine the effective liquidity of the GBP/AUD cross.

3.2.2 Floored liquidity horizons between correlated risk factors

We believe that floored liquidity horizons are a conceptually sound way to address potential issues of broken hedges introduced by varying liquidity horizons by risk factor.

The ABA would appreciate further clarification on whether a given risk factor should be assigned the same floored liquidity horizon across all desks. If that is not that case, then what liquidity horizon should be applied to a risk factor for the 'whole book' calculation.

Q2. Balance of simplicity, comparability and risk sensitivity

The revised IMA proposal is an improvement on the previous method. However, it poses significant challenges. While the current proposed method is broadly risk sensitive, it remains complex. It is much simpler for banks using simpler sensitivity based expected shortfall calculations than for banks using the full revaluation approach. Therefore the ABA view is that the proposed IMA model, while conceptually more risk sensitive and less complex than the SBA, still presents considerable challenges in terms of the complexity, operational requirements and difficulties in interpreting and communicating impacts from the liquidity horizon approach.

Our expectation is that the external market will increasingly focus on the SBA as a de-facto minimum requirement, giving little or no consideration to internal estimates, particularly if the standardised output drives a capital floor.

The shift towards standardised models as the key driver of capital requirement may lead banks to decide that the cost of running multiple models (standardised, advanced and, in some cases, economic capital), outweighs the benefits of having more risk-sensitive estimates, particularly considering the complexity and more stringent accreditation and ongoing validation requirements of the new approach.

The costs of these developments may include:

1. Less incentives for banks to continue to invest in risk systems;
2. An element of moral hazard where banks may simply rely on standardised numbers, with the burden for identifying and quantifying risks shifting more towards regulators;

3. The market failing to adequately recognise that the standardised approach is subject to estimation uncertainty and model risk similar to any other estimation process; and
4. An increasing level of disconnect between regulatory capital and the measures used for internal risk management.

The ABA proposes that an advanced modelling approach that is based on sound risk principles, that is not prohibitively complex and that is implemented consistently across jurisdictions would help improve credibility, consistency and support improved market disclosure.

Sections of CP3 for additional guidance

1. The interpretation of 'domestic' interest rates for the 7 specified currencies at 10 days and 'other currencies' interest rates at 20 days is unclear to the ABA. One concern is that this differentiation may result in issues of incomparability and inconsistency if banks in different countries apply different treatments to the same underlying risk. For example, our understanding is that a US bank and an Australian bank would apply the same interest rate horizon to an AUD interest rate exposure, while the US bank would also capitalise the FX exposure from the position. The ABA interpretation of the current proposal is that the Australian bank would apply a 10 day horizon while a US bank would apply the 20 day horizon, which would result in different interest rate risk impacts for the same exposure.
2. There is no mention of either equity or debt specific risk in the internal method. Therefore it is not clear what is expected, some additional guidance on this would be welcome.
3. There is no definition of large vs small cap stocks (unless it is intended that the standard method definition is to be followed) and there is no cut-off for what qualifies as at-the-money (**ATM**) vol (the price will almost never be exactly ATM). Both of these are required to determine liquidity horizons.
4. With reference to the January 2015 BCBS publication: *Instructions for Basel III monitoring: Version for banks providing data for the trading book part of the exercise,* the instructions provided a full update of the internal method, in reviewing that document alongside CP3 there are some questions on how default risk charge should be calculated, for example:
    a. A two factor simulation model is specified, but it is not clear from the instructions which two factors and what kind of model is expected.
    b. Pg. 218, Paragraph176b states default correlations must be based on listed equity prices, how should banks transform equity price correlation to default correlation?
    c. Pg. 218, Paragraph 176c states defaulted debt positions must be included, what PD and LGD applies to debt that has already defaulted?
    d. Pg. 218, Paragraph 176e specifies constant positions over 1 year horizon. How should banks handle options and bonds that mature before 1 year?
    e. Pg. 218, Paragraph 176f states PDs implied from market prices are not acceptable unless they are corrected to obtain an objective probability of default. Does that mean 1) rating agency ratings and 2) PDs implied from CDS are therefore not acceptable? If so, what PD data would be considered acceptable?
    f. Is it envisaged that banks be permitted to use internal method for the expected shortfall calculation and standard method for the default risk charge, as the two are calculated by separate models and are summed together?

5. The ABA also notes that the latest consultation paper does not provide a definition of equity repo risk and its sensitivity calculation.
6. Returning to CP3, one minor correction, on page 20, footnote 3 which lists the liquid currency pairs; we believe this should actually be marked against "liquid currency pairs" rather than "other currency pairs".

Non-modellable risk factors

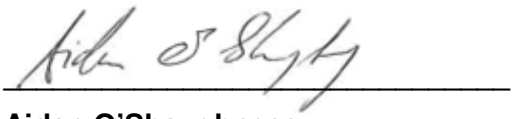
Finally, non-modellable risk factors remain a large concern particularly for banks located outside the major international markets. The current definitions move away from rate sources such as MarkIT which are widely used in the industry to committed or traded prices. Read strictly, many of the multi-contributed rate sources currently in use at banks are non-modellable as not being tradeable prices, but these have often been chosen because they are considered more reliable than what is considered a modellable risk factor definition in the proposed rules due to them being a single source and more easily manipulated.

MarkIT or other consensus end-of-day prices can be consistently reliable especially if there is a requirement of seeing prices at a minimum number of actual trades during a trading day over an appropriate period of time. Using consensus end of day pricing allows observability to be maintained, while consistency in end-of-day risk estimates and P&L is also maintained.

The ABA request additional consideration and guidance be given by the committee to how the modellable risk factor definition will be interpreted, with consideration to what the capital impact will be outside the major markets in the USA and Europe, and examples given as to what the definition means.

We thank you for taking our comments into consideration.

Yours sincerely,



Aidan O'Shaughnessy