Integrated Balance Sheet Management Solutions, Inc.

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## Interest Rate Risk in the Banking Book: EBA's 2017 consultation paper and the future of interest rate risk management.

On October 31, 2017 the EBA published for consultation the revised standards for IRRBB, updating its previous guidelines on the management of IRRBB (2015) and incorporating BCBS-IRRBB standards (2016). In line with BCBS it applies a Pilar 2 approach (i.e. not linked to minimum capital requirements). It will apply on a proportional basis to all banks across the EU banking sector once adopted by local authorities, and will come into effect year end 2018, with some transitional arrangements.

With IRRBB implementation on the local regulatory agenda across many jurisdictions (targeting implementation by year end 2018), it is worth taking a closer look at EBA document as guidance on what the future of IRRBB might look like and some of the more urgent topics for implementation.

- Putting this document in context: EBA's objective to provide a single set of harmonised prudential rules for financial institutions across multiple jurisdictions throughout the EU, results in the document being lengthy, somewhat prescriptive and having to include topics that would usually be dealt with in separate guidance documents (e.g. model risk management). This is the price to pay to achieve convergence and limit to some extent differences in interpretation. Other regulators should be able to leverage on existing guidelines in their jurisdictions to cover some of these topics.
- Striking a balance between IMA and Standardized models: The applicability of standardized models across different entities (size, complexity) and jurisdictions (structural differences and macroeconomic conditions) has been a highly debated topic, and the main reason to keep IRRBB as a Pillar 2 component. While some regulators have completely discarded the use of standardized models (e.g. U.S. Federal Reserve), others have adopted them (e.g. HKMA, yet without discouraging IMA). The EBA's dual approach, requiring the use of internal models (on a proportional basis for ICAAP) and of standardized approach (BCBS based) for regulatory reporting and comparability (despite all its flaws and limitations), is probably the only available solution. For F.I.s, this will require having the capabilities to run parallel models, and together with their regulators, understand and resolve the unavoidable differences (i.e. how to reduce or live with). Recognizing these potential frictions, it is welcomed that EBA is not contemplating any automatic supervisory measure if the prescribed EVE sensitivity thresholds are breached, triggering an enhanced supervisory dialogue.



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• Addressing Proportionality: Based on the categorisation of the institutions as per EBA's SREP Guidelines (Category 1=complex institutions) the document establishes increasing regulatory expectations for IRR modelling. For example, on the earnings front, unconditional cash flow modelling (based on repricing gaps) is supported for level 4 institutions, but not for the more sophisticated ones, requiring increasingly complex business volume and cash-flow modelling (scenario specific). Interest rate shocks and stress scenarios also increase in complexity, starting with the standard shocks for a single yield curve, and requiring incremental analysis to cover shifts in yield curves, basis and credit spreads (for level 2 on a marginal basis and a comprehensive basis for level 1 institutions). This categorization approach, establishing minimum requirements based on predefined criteria, could be a model for other regulators, reducing potential uncertainty for F.I.s.

## Changes in relation to BCBS IRRBB guidelines.

While following BCBS principles, EBA's approach seems to take the best and discard some of the more controversial points in the BCBS guidelines. Some highlights:

- Behavioral Assumptions: BCBS guidelines use a scenario dependant pre-defined look-up table (+/- 20%) to adjust base case fixed rate loan prepayments and term deposits early redemption estimates under the regulatory scenarios (in effect assuming sensitivities are similar across portfolios and institutions). EBA's document requires institutions to adjust key behavioural modelling assumptions based on the scenario, but does not provide specific adjustment parameters. Determining the parameter sensitivity is, and will continue to be a challenge for most institutions, given the lack of historical references over the last 10+ years (i.e. rising rate environment).
- Modelling Non-Maturity Deposit: While keeping the requirement of identifying core balances for non-maturity deposits (NMD), EBA's document does not provide specific caps on the percentage of core deposits, and only provides a cap on average maturity for wholesale deposits (5 years, non-specified for Retail and SMEs). Financial institutions deposits are not subject to behavioural modelling. On the other hand, it is more specific in terms of expectation regarding NMD assumptions (balance decay, Betas, potential migrations, need to incorporate expert judgement vs. a statistical only approach).
- Aggregating of exposures across Currency: BCBS and ECB apply a 5% threshold (of total non-traded assets), requiring F.I.s to model currency specific parameters and yield curves. In addition, EBA is proposing a minimum 90% coverage (i.e. non-material currencies would need to be covered until the minimum is reached). As in the case of the BCBS guidelines, the aggregated EV exposure will be maximum of the sum of negative impacts across currencies in each of the six scenarios, and across the two parallel scenarios for NII. Institutions will be allowed to use other aggregation methods for internal capital allocation.



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• Own Equity Capital: The use of income stabilizing strategies (investment of own funds) will be subject to greater scrutiny in terms of integration of eligibility, selection of maturity profile and assumptions. Regulatory focus will be on the impact of those strategies on the capability to adjust to significant changes in market conditions (incl. forced sales).

## Implications for F.I.

- ICAAP and Risk Management Implications: IRRBB needs to be an integral part of the overall ICAAP /
  Decision Making and Risk Management process considering both existing and prospective exposure, as
  well as interaction with other types of risks (credit, liquidity, market) in enterprise-wide stress testing. In
  terms of internal capital assessment and allocation for IRRBB, they are required to use their own models,
  yet incorporate in their decision making the results of the regulatory supervisory outliers test.
- Greater Consistency: Regulatory expectations are for EV measures to be aligned with methods used to
  value assets and liabilities internally. On the earnings side, alignment to internal business plans and
  forecasts, and with the determination of commercial margins (using a transparent methodology, applied
  consistently across all business units).
- Model Risk Governance: Increased freedom brings greater responsibilities. Recognizing the importance
  and sensibility of behavioural assumptions in measuring IRRBB, both BCBS and EBA require a significant
  understanding and Governance Processes (across the model life cycle) to ensure exposures are fully
  captured, methodologies / assumptions and their limitations (incl. sensitivity to) are properly supported,
  implemented and well understood across the different levels of the organization. This includes models
  and assumptions acquired from 3rd party vendors.

## Challenges ahead:

With a target implementation date of year end 2018, it will be a tight window to review and advance/complement existing practices. Some of the key items to focus on:

- Review of interest risk management strategy, risk appetite, measurement and stress testing methodologies, and their implication for internal capital adequacy assessment and allocation;
- Establishing a risk registry across the organization and different risk types;
- Developing required parameters (s.t. model validation requirements and including back-testing), focusing on behavioural options (non-maturity deposits betas and decay, fixed rate loan prepayments, pipeline risk, term deposits early redemption, etc.) with the required granularity (homogeneous groups) and across currencies (required coverage);
- Adjusting internal processes to ensure required level of consistency across finance, risk management and capital management functions;
- Establishing training programs across all levels of the organization.

Please contact us if you require assistance in developing / implementing your IRRBB framework.