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OSFI (Canada) - IRRBB Draft Guidelines (Oct.2018)

On October 5th, 2018 OSFI published its draft guidelines on Interest Rate Risk in the Banking Book (IRRBB) updating its previous guidelines on the management of IRRBB (2004) and incorporating BCBS-IRRBB standards (2016). In line with BCBS it applies a Pillar 2 approach (i.e. not linked to minimum capital requirements). With a target implementation date for January 2020 the revised guidelines (B-12) will require covered financial institutions (banks, bank holding companies, federally regulated trusts and loan companies and cooperative retail associations, here F.I.s) to update their existing risk management framework, systems, policies, procedures and IRRBB models to comply with the new regulatory expectations over the next 12 months.

Some highlights:

- **Risk Coverage:** In line with the BCBS principles, covered interest rate risks (IRR) include gap risk (repricing and maturity, parallel and non-parallel), basis risk, option risk (automatic and behavioural) and credit spread risk (CSRRBB). Institutions are expected to be familiar with all potentially material elements, identify them and have adequate procedures and controls in place both for existing and emerging risks (new products, activities)

- **Risk Measures:** F.I. are expected to implement and manage risks through earnings based (EAR) and Economic Value (EVE) measures. For larger and more sophisticated institutions, the expectations include having an appropriate funds transfer pricing mechanism (FTP) in place with risk capital and associated P&L being allocated and measured accordingly.

- **Senior Management** is expected to have an in-depth understanding of IRRBB (e.g. risk exposures and drivers, major hedging and risk-taking activities, key model assumptions and policies), setting appropriate limits and exception management, reviewing major hedging or risk-taking initiatives, having adequate systems and standards as well as a comprehensive and regular IRRBB reporting and review process.

- **Limits** should be set for economic value and earnings based on the nature, size, complexity and capital adequacy of the F.I., and could include sub-limits for individual business units, portfolios, instruments, as well as for gap risk, basis risk, and/or optionality. The interest rate movements used to develop these limits should represent meaningful shock and stress situations by currency and across currencies (i.e. a +/- 100 bp assumption will no longer meet regulatory requirements). OSFI is adopting the BCBS' outlier test with outlier banks defined (as a minimum) as those with Economic Value sensitivity above 15% of Tier 1 Capital (under the six prescribed scenarios) and could establish additional measures (e.g. NII sensitivity based)

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- **Required Capabilities:** IRRBB will need to be integrated with the broader risk management framework and feed into the decision-making process (including ICAAP), be flexible, forward looking and aligned with its business/capital planning and budgeting activities (changes in balance sheet composition). Internal measurement systems (IMS) should capture all material IRRBB sources and be able to calculate the impact on economic value and earnings of multiple scenarios, including: a) internally selected (linked to ICAAP); b) historical, hypothetical, and forward looking stress scenarios; c) the six prescribed IR shock scenarios: and d) other ad-hoc regulatory scenarios, incorporating changes in portfolio composition, new products, new market information and new emerging risks. OSFI's guidelines requires institutions to adjust key behavioural modelling assumptions based on the scenario but does not provide specific adjustment parameters (e.g. BCBS)

- **Measurement systems and models:** OSFI is encouraging FI to adopt a variety of methodologies to quantify IRRBB (not rely on a single measure), from static to dynamic balance sheet simulations, requiring comprehensive risk coverage on a timely manner, with automated (and validated) inputs to the extent possible. Reports should be available on a regular basis (on a consolidated basis and by currency), comparing IRRBB exposure to limits, as well as past forecasts or risk estimates with actual results and provide aggregate information as well as sufficient supporting detail to assess IRR sensitivity.

- **Model Risk Governance:** Recognizing the importance and sensibility of behavioural and modelling assumptions in measuring IRRBB, OSFI requires 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. Areas of focus include interest rate options (e.g. prepayment, pipeline, caps/floors and term deposits early redemption risk), non-maturity deposits, treatment of own equity and accounting principles.

What is missing?

- **Proportionality and best practices:** While the guidelines state that it should be applied on a commensurate basis with the nature size and complexity as well as the structure, economic significance and general risk profile of the institution, it does not spell out what those expectations are (e.g. EBA's classification based), leaving F.I. potentially exposed to regulatory uncertainty. While it specifically requires D-SIBs to establish a committee to oversee asset liability management, for managing and vetting the strategic direction of IRRBB (i.e. ALCO), it fails to make such a recommendation for smaller entities, which due to their smaller size and diversification might be more exposed to fluctuations in interest rates.

- **Currency aggregation:** A difficult and contentious topic across the globe. OSFI requires institutions to assess their exposure in each currency and allows F.I. to implement (internal) methods to aggregate their IRRBB

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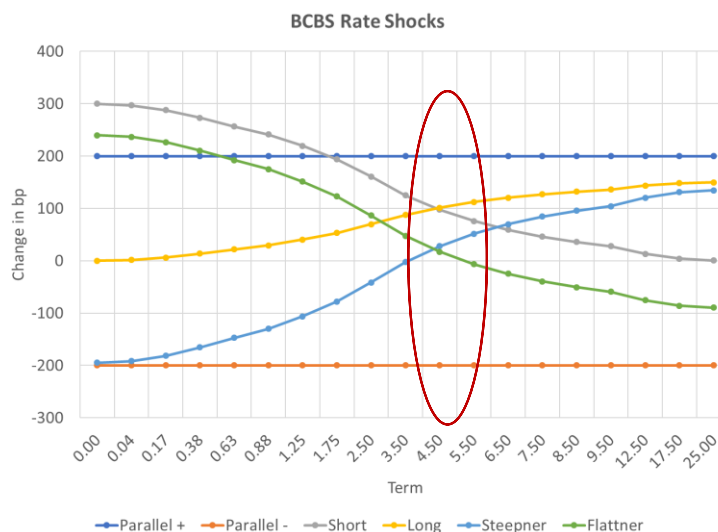
exposure across currencies under different assumptions about correlations (stating that it might exercise discretion), but does not specify if this will be allowed only for internal measurements (i.e. ICAAP) or also for the outlier test (BCBS uses the sum of negative impacts across currencies under the prescribed scenarios, while EBA allows for 50% offset of positive impacts in their final guidelines). This has the potential of making published results not comparable. Also, in contrast to the BCBS and ECB guidelines, OSFI does not establish a threshold (% of total non-traded assets), requiring F.I.s to model currency specific parameters and yield curves and does not specify a minimum coverage requirement.

- **Rate Scenarios:** OSFI is adopting the BCBS standardized rate shock scenarios for the outlier test (CAD and USD parallel 200 bp; Short 300 bp Long 150 bp). In the Canadian market, mortgages will usually amortize over a long period (20+ years) but have contractual repricing term below 5 years. The parameters used to calculate the BCBS interest rate shock scenarios for CAD make the two parallel scenarios the only relevant ones around the 5-year term, with the other scenarios falling in the 0 to +100 bp range (see next graph).



- **Disclosure requirements:** OSFI is requiring IRRBB exposure to be measured and disclosed on an annual basis. This seems contrary to common practices, requiring reporting at least on a quarterly basis (with a more detailed qualitative disclosure on an annual basis). It provides as an example of IR shock scenarios parallel 10, 25, 100, 200 bp, three non-parallel shocks (not specified) and sensitivity to key rates but does not directly require disclosure of EVE sensitivity to the six prescribed BCBS shock scenarios (two for NII).

- **Comparability:** While keeping the requirement of identifying core balances for non-maturity deposits (NMD), OSFI's document does not provide specific caps on assumed term, limitations on the type of deposits that can be modelled (e.g. deposits from F.I.) and is very generic in terms of the required disclosure of the relevant parameters. As mentioned before, currency aggregation could also lead to comparability issues.

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Challenges ahead:

- With a target implementation date for January 2020, it will be a tight window to review and advance/complement existing practices. Some of the key items to focus on:
- Review and update of existing risk management framework, policies, procedures and IRRBB models to comply with the new regulatory expectations, including interest risk management strategy, risk appetite, measurement and stress testing methodologies, and their implication for internal capital adequacy assessment and allocation;

- Balance sheet and net interest income modelling capabilities will need to be updated, requiring a comprehensive approach and systems to measure and manage IRRBB with the required flexibility, e.g. to accommodate ad-hoc regulatory requirements using different scenarios and/or assumptions and measuring IRRBB across the different dimensions (NMD, optionality, etc.) and metrics.

- 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.

Please contact us to learn how we can support your organization in implementing / updating your IRRBB framework and systems at:

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