Interest Rate Risk in the Banking Book - Consultative Document

The Division Bank and Insurance of the Austrian Federal Economic Chamber, as the representative of the entire Austrian Banking Industry appreciates the opportunity to comment on the Consultative Document (CD) published in June 2015 by the Basel Committee on Banking Supervision (BCBS) on Interest Rate Risk in the Banking Book (hereinafter “BCBS IRRBB CD”).

In this document, the view of the Austrian Banking Industry on the CD is summarized with a focus on the most salient points of the proposed framework.

This document is structured as follows. In the first part, general and most important aspects are presented. In the second part, some technical aspects with a focus on the proposed Pillar 1 framework are discussed. In the third part, specifics of the Austrian banking market with IRRBB relevance are highlighted that should duly be reflected in an IRRBB framework. This section also refers to CEE specifics given the fact that the CEE region is the home market of the largest Austrian banking groups.

In general, the Austrian Banking Industry sees the need for another consultation on the envisaged IRRBB framework given the view that the BCBS IRRBB CD should be altered significantly.

Part 1 - General Aspects

In Part 1 the following topics are briefly discussed summarizing the general stance of the Austrian Banking Industry on the BCBS CD:

1. IRRBB should not be subject to a Pillar 1 capital charge;
2. An “enhanced” Pillar 2 approach including disclosure of a standardized Pillar 1 capital charge should be avoided;
3. Standardized modelling of customer behavior with one-size-fits-all fixed set of parameters is strongly opposed;
4. In particular, the modelling of non-maturing deposits (NMDs) should not be standardized, but based on internal risk management techniques;
5. A “true” Pillar 2 approach based on EBA IRRBB Guidelines is supported;
6. Internal Capital on IRRBB should be based on loss risk, not on variability risk;
7. Margins should be excluded from the IRRBB framework;
8. Credit Spread Risk in the Banking Book should be fully excluded from the IRRBB framework.

Ad 1. IRRBB should not be subject to a Pillar 1 capital charge - the proposed Pillar 1 capital charge is overly conservative
The Austrian Banking Industry supports the view that IRRBB should not be subject to a Pillar 1 capital charge being critical especially on the following points:
   a. Lack of sufficient risk sensitivity
   b. Lack of comparability of resulting capital charges and misleading signals to supervisors and the market
   c. Material deviation between internal/economic and regulatory view on IRRBB with wrong hedging incentives
   d. Adverse systemic effects like restriction of maturity transformation

Ad a. A global standardized Pillar 1 approach will not be sufficiently risk-sensitive given the inherent simplifications and numerous assumptions to be made under a global one-size-fits-all framework. Such a framework will not sufficiently reflect specificities of local jurisdictions including, among other things, different customer behaviours, different product ranges, different business models and different market and regulatory environments. Local specificities lead to justifiable heterogeneous assumptions on different aspects of IRRBB, different measurement techniques and risk management practices. Standardization will necessarily not reflect such specificities and resulting capital charges will not convey a true and fair view of a bank’s actual level of IRRBB.

Ad b. A standardized framework leads to comparability in the sense that resulting numbers are computed in the same way. However, it does not lead to comparable outcomes, i.e., given that a standardized metric does not accurately reflect actual risk level, banks with comparable risk levels according to internal measurements would have different capital requirements according to the proposed standardized approach. Reliance on standardized, incomparable results can lead to misinformed and wrongly-placed considerations and recommendations for supervisors, banks’ IRRBB management and, if disclosed to the public (as proposed in the enhanced Pillar 2 approach), market participants.

Ad c. Standardization will result in material deviations between the internal/economic view and the regulatory perspective on a bank’s level of IRRBB. Banks will face the dilemma of either managing the regulatory or the true economic IRRBB position, but will not be able to achieve both at the same time given the materiality of deviations between the two positions. Such dilemma might also be true for other risk types, but is especially serious for IRRBB given the impossibility to standardize IRRBB compared to other risks. Such deviation could also lead to changes in the IRRBB hedging program of banks. Instead of hedging “true” risk from an economic perspective, banks would focus on hedging the standardized risk metric with the goal of reducing regulatory capital requirements. Banks could thus be forced to hedge risks
that are actually no risk from an economic perspective and take hedging actions that will create additional risks (in terms of NII or EVE).

Ad d. The proposed approach might substantially increase systemic risk instead of strengthening financial stability. First, the maturity transformation function of banks could be substantially restricted (on top of the envisaged NSFR). Based on an EVE-based standardized framework including standardized behavioral modelling for equity and NMDs, in an increasing interest rate environment, banks with long-term assets will be strongly penalized and thus be incentivized to shorten the overall duration of their asset side and/or cluster around the same investment horizon. This will lead to more volatile earnings and, in turn, to more volatile return of equities and higher cost of equity since investors will expect a higher premium for accepting more volatile return.

Second, from a customer perspective, the increased variability on bank’s asset side means that interest rate risk (i.e., rate variability risk) is passed on to the real economy, especially retail customers that are least able to manage this risk. This in turn also results in an increase of credit risk for banks induced by rising interest rates. Third, the additional capital charge for IRRB will need to be passed on to customers, i.e., factored in product pricing with lower interest rates on liabilities paid to customers and/or higher interest rate charged to customers’ assets. This, all other things equal, will restrict availability of credit for the real economy.

In general, we deem the proposed Pillar 1 charge as being overly conservative. The framework combines a number of conservative elements which - when assessed in isolation - might still seem to be adequately prudent for a Pillar 1 charge, but lead to an overly conservative risk figure when holistically assessing their combined impact. We just highlight the most prominent elements (with some of them further detailed below): 1. Focus on loss instead of variability risk; 2. Short modelling of NMDs; 3. O/N modelling of equity; 4. Full inclusion of margins; 5. Holding period of 6 months; 6. No recognition of embedded gains; 7. Limited currency aggregation.

Ad 2. An “enhanced” Pillar 2 approach including disclosure of a standardized Pillar 1 capital charge should be avoided

The proposed “enhanced” Pillar 2 approach is in fact a Pillar 1 approach “in disguise”, as it requires the public disclosure of the outcome of the standardized Pillar 1 charge in combination with the requirement for supervisors to use the standardized framework as a comparison metric (benchmark) and fallback approach. The Austrian Banking Industry believes that this will effectively act as a constraint on banks’ internal modelling of IRRBB and most probably as a floor to the capital banks should hold. In substance, the enhanced Pillar 2 approach is therefore not different to the proposed Pillar 1 approach.

Such outcome is especially probable for the EU/Eurozone for the following two reasons:

EBA SREP Guidelines1:

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1 EBA Guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP), published on 19 December 2014, EBA/GL/2013/14 (hereinafter referred to as « EBA SREP Guidelines »).
In December 2014, EBA published comprehensive SREP Guidelines which aim at an European-wide harmonization of Pillar 2 supervisory practices and will apply from January 2016 onwards; the SREP Guidelines explicitly capture IRRBB as a separate risk category; to achieve the envisaged EU-wide harmonization, the SREP Guidelines explicitly follow a Benchmark-based approach for determining the appropriateness of the ICAAP2; the Austrian Banking Industry therefore believes that national supervisors within EU will use a standardised IRRBB measure proposed by BCBS as a first instance benchmark; the EBA Guidelines will apply from January 2016 onwards (i.e., have to be implemented in national supervisory practices of each EU member state).

ECB/Single Supervisory Mechanism:
The European Central Bank, since November 2014 in charge with the supervision of the approximately 130 largest banking groups located in the Eurozone, also explicitly follows a Benchmark-based approach in order to achieve a level playing field between supervised banks. Again, the Austrian Banking Industry believes that ECB will actively use an IRRBB standardised measure as a benchmark / minimum floor for all banks within the SSM.

From an implementation perspective, the enhanced Pillar 2 approach adds operational and technology burden on banks that could distract from their efforts to maintain a robust and integrated IRRBB management framework, which is in the focus of most of the proposed Pillar 2 Principles.

Ad 3. Standardized behavioral modelling with one-size-fits-all fixed set of parameters is strongly opposed
The modelling of customer behavior should not be standardized with a fixed set of one-size-fits-all quantitative parameters. Any regulatory prescribed, one-size-fits-all set of behavioral models should be avoided, as such standardization would not be able to take into account the complexity of all the determining variables driving customer behavior (including, inter alia, product features, demographic factors, market competition, jurisdiction-specific regulatory environment, etc.); all the more given that the BCBS does not make transparent how the behavioral parameter values prescribed in the CD are derived.

The figures and metrics resulting from such standardization would not be able to give an adequate risk picture and would either over- or underestimate “true” risk. Consequently, such information would be misleading and highly inappropriate for both a Pillar 1 capital charge and public disclosure (as proposed under the enhanced Pillar 2 approach). The main reason why a standardized framework for IRRBB is not feasible is due to the inability to standardize customer behavior in a meaningful way.

Ad 4. In particular, the modelling of non-maturing deposits (NMDs) should not be standardized, but based on internal risk management techniques
Non-maturity deposits (NMDs) (together with prepayment risk on assets) are the most prominent example where a standardized modelling should be avoided. Product

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1 As an example, we refer to paragraph 335: Competent authorities should develop and apply risk-specific supervisory benchmarks as a means to challenge ICAAP calculations for those material risks, or elements of such risks, that are not covered by Regulation (EU) 575/2013, or to further support the determination of risk-by-risk additional own funds requirement where ICAAP calculations for those material risks, or elements of such risks, are deemed unreliable or are unavailable.). More details are given in chapter 7.2 “Determining additional own funds requirements”, paragraphs 325-326 and 335-338 and other chapters of the Guidelines. A search for the term “benchmark” in the SREP Guidelines yields 63 results.
characteristics themselves reflect how best they should be hedged for IRR purposes. Enforcing arbitrary or non-transparently determined constraints is counter to this discipline.

The proposed standardized treatment of NMDs is far too restrictive. This applies to all elements of the proposed standardization (e.g., pass through floors, stability caps, maximum tenor for core NMDs, O/N-modelling of non-core NMDs), especially when assessing the combined effect of all these elements. By constraining pass-through and stability parameters and prescribing a maximum investment life, the CD is doubling up on conservatism.

Banks will not be able to show a risk-adequate picture of NMDs in their interest rate risk position and will face a stark choice between managing interest rate risk to regulation or true economics. The proposal is in sharp contrast with both risk management practices of Austrian banks and the approach taken by the recently published EBA Guidelines.

More in particular, the volume-weighted average duration for the core part (as derivable from table 5 of the CD) is limited to 36 months/3 yrs. Applying the 60% cap to the core part as given in Table 4 for retail/transactional leads to an average duration of just 1.8 yrs for the core part and an average duration of 1.08 yrs for the whole NMD-volume (core & non-core). This is in sharp contrast with the average duration applied by banks to NMDs which is typically much longer. The EBA IRRBB Guidelines³ also allow a much longer modelling with an average duration for NMDs (core & non-core) of up to 5 years which is approximately 5 times the number that is allowed by the CD for retail/transactional⁴.

The main objective of modelling NMDs is to determine the best hedge to stabilize the product margin over time. As with all going concern businesses in every industry, a stable gross margin is a key objective to managing a business over a business cycle and to cover the large fixed cost base associated with the offering of this type of product with NMDs playing a key role in this strategy. Against this background, the typical approach applied by banks for NMDs is a “natural hedge” between the asset and liability side.

Ad 5. A “true” Pillar 2 approach based on EBA IRRBB Guidelines is supported

The Austrian Banking Industry is in favor of a “true” Pillar 2 approach for IRRBB. True Pillar 2 means a framework that requires banks to comply with Binding Sound Practice Principles for IRRBB that are complemented by tests to identify Potential Outlier Banks (so-called Standard Outlier Tests, SOT); within SREP, local supervisors assess compliance of banks with these requirements and take appropriate action in case of need.

The true Pillar 2 approach is in line with the approach followed hitherto by BCBS, but also by EBA, the European Single Rulebook regulator. EBA recently re-confirmed the true Pillar 2-approach in two separate publications, the EBA IRRBB Guidelines, published in May 2015 (just some days before the BCBS CD was published), and EBA SREP Guidelines, published in December 2014⁵. The EBA IRRBB Guidelines will become effective as of January 2016. They are comparable in nature and content to Chapter 3 of the BCBS CD, but do not contain the

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¹ Guidelines on the management of interest rate risk arising from non-trading activities” (final report), published on 22 May 2015, EBA/GL/2015/08 (hereinafter referred to as “EBA IRRBB Guidelines”), p. 24, para 24 (d).
² EBA IRRBB Guidelines, p. 24: The assumed behavioral repricing date for customer balances (liabilities) without specific repricing dates should be constrained to a maximum average of 5 years (where the average assumed repricing date is computed as the average of the assumed repricing dates of different accounts subject to behavioral repricing weighted by the nominal value of all such accounts. This means that for the computation of the average maturity, both the stable and the volatile portion will be included).
³ Chapter 6.5 deals of the EBA SREP Guidelines with IRRBB.
obligatory disclosure of a standardized Pillar 1 measure and introduce an enhanced version of
the hitherto existing Standard Outlier Test (SOT). In Austria, a SOT for IRRBB has been in
place for many years based on the IRRBB Principles published by the BCBS in 2004⁶ (i.e.,
200bp interest rate shock combined with a 20% outlier ratio). The current SOT is a well-
established regulatory ratio that is regularly reported to local supervisors and used for
internal risk management purposes as appropriate.

With respect to Outlier Tests, the Austrian Banking Industry understands the need of
supervisors to improve and harmonize the identification of potential outlier banks to ensure
that banks could be identified as a potential outlier for the same reasons. This introduces
some consistency in this otherwise hard to standardize risk type. To our understanding,
Outlier Tests should be based on the following main principles:

- The main function of Outlier Tests is to serve as an IRRBB early warning system;
  Outlier tests should inform of potential interest rate risk that would be identified as
  outlier compared to other similar banks (i.e. operating in similar jurisdictions, with
  similar products and similar business models) with no automatic conclusion on capital
  need to be derived from such tests; given the heterogeneity inherent in IRRBB, there
  could be a number of reasons why a bank may be identified as a potential outlier; any
  supervisory action should be taken on a case-by-case basis.
- As outlier tests measure variability risk and not loss risk and also given its
  methodological limitations (static metric, etc.), they should not be used to derive
  internal and/or regulatory capital; any automatic additional capital charge based on
  OT results should be avoided; instead OT results should be used as a trigger for further
  assessment by supervisors in line with SREP.
- Behavioral modelling should be fully allowed and banks given full flexibility to use its
  internal measurement systems (IMS) for IRRBB in Pillar 2, subject to supervisory
  assessment; national regulators should not impose discretionary restrictions (e.g.
  caps/floors on NMD).

Currently we see a clear divergence in approaches between BCBS focusing on an explicit or
disguised Pillar 1 charge and the European regulator (EBA) favoring a true Pillar 2 approach
including SOT. In case the BCBS IRRBB measure is additionally adopted there is the danger
that European banks will have to fully comply with both measures. This would put European
banks at a disadvantage on global level. The enhanced SOT will be applicable in EU
jurisdictions as of January, 2016, subject to implementation by local supervisors.

**Ad 6. Internal Capital on IRRBB should be based on loss risk, not on variability risk**
The BCBS CD captures variability risk and requires a Pillar 1 capital charge for economic value
changes of the Banking Book (excluding equity) induced by a pre-defined set of interest rate
shocks. More generally, variability risk can be understood as risk metric that is sensitive to a
change in interest rates. For regulatory capital purposes, IRRBB should reflect loss risk only,
i.e., the potential loss of capital, and not variability risk, similar to the regulatory capital
concept used for other risk types (e.g., credit risk, operational risk).

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The BCBS proposal brings the capital charge for IRRBB broadly in line with the capital charge for trading book positions, obviously with the aim to avoid arbitrage between banking book and trading book. The economic value of the banking book (excluding equity) is interpreted as a measure of bank solvency by applying a trading book type approach and viewing the economic value of the banking book as the liquidation value of the balance sheet. However, fundamental differences in nature and purpose of the trading book and the banking book require a different treatment for regulatory capital purposes.

Trading book positions are accounted for through P&L based on fair value; any expected reduction in economic value (= negative economic value sensitivity) due to interest rate changes represents an expected future loss that is to be capitalized, as the economic value sensitivity risk is the future loss risk, i.e., variability risk and loss risk are the same and a decrease in the economic value of trading book positions leads to a loss. Banking book positions are accounted for through P&L based on amortized cost; changes in interest rates affect bank’s P&L only by changing its net interest income (NII). However, as long as NII remains positive, such variability on positive earnings (= NII variability risk) should not attract a capital charge.

From an earnings perspective of IRRBB, loss risk arises if future NII becomes negative. Regulatory capital for IRRBB should be required where under a determined interest rate shock the (cumulated) NII over a specified time horizon (e.g., three to five years) becomes negative. The amount of capital required would be the (discounted) cumulative negative NII amount.

From an economic value perspective of IRRBB, loss risk arises, if the economic value of equity, i.e., the economic value of assets minus the economic value of liabilities, becomes lower than the book value of equity. Regulatory capital for IRRBB should be required where under a determined interest rate shock the expected economic value of equity is lower than the book value of equity. The amount of capital required is the difference between the economic value of equity and the book value of equity.

**Ad 7. Margins should be excluded from the IRRBB framework**

Current risk management practices for IRRBB typically follow an approach where the positions originated by the business areas are hedged via internal transfer prices (generally often referred to as “Funds Transfer Prices”, FTP) in order to indemnify business from the risk of interest rate changes. The difference between the customer rate and the FTP is the margin which covers (risk) costs associated with the position. The locked-in margin remains stable over the life-time of the loan and does not pose the bank to loss risk. The FTP-position is sensitive to interest rate changes, whereas the margin is not (from a NII perspective). The FTP-position is managed by Treasury on a bank-wide-level in accordance with IRR risk appetite defined by the board.

The CD requires including a “spread component” into the measurement of IRRBB with no clear specification of the term. To our understanding it means the use of customer rates (and not FTP rates), i.e., the inclusion of customer margins. Such inclusion has the following major drawbacks:

- It is questionable from a methodological point of view as it requires to include a component into the IRRBB framework that does not pose the bank to capital loss risk
and is - from a NII-perspective - fixed, i.e., not sensitive to changes in risk-free interest rates; the CD captures the interest rate shock-induced delta in the present value of margins, i.e., variability risk; in the previous section (loss risk vs. variability risk) it is argued that an IRRBB capital framework should be based on loss risk, not on variability risk;

- It is not in line with current risk management practices applied by banks as specified above leading to a substantial divergence between the interest rate risk position used for regulatory and internal risk management purposes;
- As banks will show a higher risk position, the inclusion of margins artificially inflates the resulting IRRBB capital charge with the counter-intuitive effect that the more profitable (and thus “safer”) a bank is the more it will be penalized by higher capital charges due to higher (net) margins;
- A position perfectly hedged from an internal risk management perspective would result in an open interest rate risk position when margins are included; “hedging” the margin position reduces earnings and introduces an element of additional earnings volatility; banks will show an open position either for regulatory or internal risk management purposes.

Simplified example of IR risk measurement based on internal transfer prices vs. external cashflows to support our argumentation:

<table>
<thead>
<tr>
<th>Product</th>
<th>Asset Side</th>
<th>Liability Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>Mortgage portfolio</td>
<td>Term Deposit portfolio</td>
</tr>
<tr>
<td>Maturity</td>
<td>500 mn €</td>
<td>500 mn €</td>
</tr>
<tr>
<td>External rate:</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Internal Transfer price (market rate)</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Based on internal transfer prices this leads to the following cashflows:

<table>
<thead>
<tr>
<th></th>
<th>Asset</th>
<th>Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notional cashflow</td>
<td>Transfer price cashflow</td>
<td>Notional cashflow</td>
</tr>
<tr>
<td>1y</td>
<td>10</td>
<td>-10</td>
</tr>
<tr>
<td>2y</td>
<td>10</td>
<td>-10</td>
</tr>
<tr>
<td>3y</td>
<td>10</td>
<td>-10</td>
</tr>
<tr>
<td>4y</td>
<td>10</td>
<td>-10</td>
</tr>
<tr>
<td>5y</td>
<td>500</td>
<td>10</td>
</tr>
</tbody>
</table>

The position is closed, and EVE calculation under shock will not lead to capital charge.

Based on external rates thereby including margins this leads to the following cashflows:

<table>
<thead>
<tr>
<th></th>
<th>Asset</th>
<th>Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notional cashflow</td>
<td>External rate cashflow</td>
<td>Notional cashflow</td>
</tr>
<tr>
<td>1y</td>
<td>15</td>
<td>-5</td>
</tr>
<tr>
<td>2y</td>
<td>15</td>
<td>-5</td>
</tr>
<tr>
<td>3y</td>
<td>15</td>
<td>-5</td>
</tr>
<tr>
<td>4y</td>
<td>15</td>
<td>-5</td>
</tr>
<tr>
<td>5y</td>
<td>500</td>
<td>15</td>
</tr>
</tbody>
</table>

A perfectly hedged position from a FTP perspective therefore leads to an ‘open IR position’. With respect to EVE calculation under shock this could lead to sizeable capital charges.
The Austrian Banking Industry believes that IRRBB should be measured based on interest rate sensitive flows only to avoid comingling with other cost and risk elements to give a fair and meaningful description of the inherent IR risk. IRRBB measurement should therefore be based on internal transfer prices with margins being excluded. On the other hand, inclusion of margin will distort the results of IRRBB calculation.

Ad 8. Credit Spread Risk in the Banking Book should be fully excluded from the IRRBB framework
The coverage of Credit Spread Risk in the Banking Book (CSRBB) is unclear and inconsistent in the CP. CSRBB is fully captured in the Principle-based Pillar 2 part of the CD as a component of IRRBB, but is not captured in the Standardized Pillar 1 capital charge proposal. Our understanding of CSRBB is that it is not just a component of IRRBB. It is separate risk type and managed in a different way than IRRBB. The new framework for IRRBB should be clear from a risk coverage-perspective and therefore concentrate solely on IRRBB and exclude CSRBB. This approach is fully in line with EBA SREP Guidelines (paragraphs 199, 288) that capture IRRBB in a dedicated section explicitly excluding CSRBB which is captured under market risk.

Part 2 - Technical Aspects
Introductory remark: The discussion in this part on selected aspects of the CD implicitly assumes a future Pillar 1 capital charge for IRRBB, but should not at all be misinterpreted as endorsing such a charge. It should be viewed as only intended to enhance constructive contribuitionto the ongoing discussion for an appropriate IRRBB framework within the consultation process.

Overview
Part 2 discusses the following aspects of the proposed framework, most of them related to the Pillar 1 capital charge:
1. The scope of the framework is unclear
2. The prosed NII measure does not reflect current risk management practices
3. Interest Rate Scenario Design should be more prescriptive
4. The approach for basis risk should be changed materially
5. Fixed rate loan commitments need clarification
6. The treatment of automatic options is burdensome and not in line with current risk management practices

Ad 1. Scope of the framework is not fully clear and guidance missing for positions that are not interest rate-sensitive
In general, the CP aims at addressing interest rate risk in the banking book. However, explicit language is missing confirming the understanding that the term “banking book” includes all positions that are not regulatory trading book (with Accounting treatment according to IFRS/local GAAP being irrelevant) in order to avoid any double counting with capital charges foreseen for regulatory trading book positions and being consistent with the boundaries approach of the Fundamental Review of the Trading Book.

The CD (section 2.1) explicitly excludes some banking book positions from the framework in an exhaustive way (esp. fixed assets, equity, capital instruments). This in turn would mean that all other banking book positions are to be included irrespective of whether they are interest rate-sensitive or not. It is generally questionable, if positions that are not interest-
rate sensitive should be included in an IRRBB framework. The EBA SREP Guidelines follow a different approach as the scope of these Guidelines is explicitly limited interest rate-sensitive positions outside the trading book (see section 6.5.1, paragraph 288).

In case such positions are to be included in the IRRBB framework guidance is missing especially regarding modelling of such positions. For example, this refers to positions like
- Structured instruments/certificates, etc. whose remuneration is not (fully) linked to an interest rate, but e.g. to an equity/commodity/real estate/etc. index,
- Shares,
- Inflation-component of inflation-linked bonds,
- Subordinated/hybrid instruments whose remuneration is linked to an earnings measure, but do not qualify as regulatory capital,
- Other assets (e.g., provisions),
- etc.

Guidance is also missing on the treatment and time bucket mapping of the asset-side equivalent of NMDs, i.e., current accounts. In practice, such assets are modelled by banks in a similar way like sight deposits reflecting actual customer behavior.

**Ad 2. The proposed NII measure is an EVE-measure “in disguise” and does not reflect best practice risk management approaches**

The current proposal is biased towards EVE and does not capture both perspectives of IRRBB (economic value and earnings) in a balanced way. Any NII measure within an IRRBB framework should be subject to proportionality and thus avoid undue complexity, but should also better reflect risk management best practices.

The earnings measure introduced by the BCBS is a **crude, simplified and static measure** which lacks essential elements of dynamic NII modelling, esp. assumptions on volume of new business, interest term structure of rolled-over/new business, margins of rolled-over/new business, timing of interest rate curve changes, etc. The balance sheet is kept static by rolling over positions that are running out until the end of the simulation horizon. The number of interest rate shocks is reduced to just two parallel shocks in order to keep methodological consistency. The discounting feature of the approach is understood to ensure comparability with the EVE approach, however is not in line with earnings-based measurement approaches currently applied by banks. In essence, the earnings approach is equivalent to the EVE approach (i.e., EVE “in disguise”) the main difference being that the time horizon of the earnings measure is limited (with specific horizon T still to be determined by BCBS), whereas the time horizon of the EVE approach is not.

NII modelling can include a variety of dynamic elements, e.g., explicit assumptions on roll-over of existing business, assumptions on new business in line with budget/multi-year planning and modelling of customer behaviour under different interest rate scenarios. Subject to proportionality, banks include such dynamic elements when modelling NII.

**Ad 3. Interest Rate Scenario Design should be more prescriptive**

With respect to interest rate scenario specification, the CD follows a hybrid approach in essence leaving it up to the bank to determine the current local risk free rates per currency and prescribing the global shock parameter \( \alpha \) and the scalar \( S \) (see p. 15 and Annex 1). According to the CD “applying global interest rate shock parameters to local rates is an
acceptable trade-off between maintaining an international standard with some minimum level of commonality across jurisdictions and enabling the capture of the local rate environment.” (p. 16).

Technical guidance is needed how risk free rates shall be obtained and corresponding zero-coupon rates shall be calculated. Some more prominent examples where guidance is needed are:

- Definition of “risk free” given the variety of views on which rate curves are to be considered as “risk-free”; such guidance should be given per jurisdiction;
- Eligible data source providers/systems from which risk free rates can be obtained;
- Fixing of interest rates levels in terms of date and timing (e.g. end-of-month, end-of-day values);
- Approach in case there is a lack of available market data (e.g. lack of long-term tenors);
- Etc.

Such guidance will be especially important for jurisdictions with less developed capital markets (e.g., in CEE) and smaller, less sophisticated banking groups. Without such technical guidance, expectation is that banks in the same jurisdictions will use different risk free rates and/or different rate levels. Such heterogeneity would also have to be expected for internationally active banking groups with a substantial numbers of entities in different jurisdictions. A lack of appropriate guidance would substantially undermine the standardization as envisaged by the BCBS and lead to non-comparability of stress results and resulting capital charges.

Ad 4. The approach for basis risk should be changed materially

It is the understanding of the Austrian banking industry that the BCBS recognizes the flaws of the proposed approach for basis risk. Given the envisaged changes for basis risk, this document addresses some more general points only:

1. The BCBS CD addresses basis risk for the NII measure, but does not require a basis risk add-on for the proposed EVE measure. To our understanding, basis risk is not automatically captured by an EVE-based measure;
2. Basis risk addresses non-parallel gap risk, i.e., changes in the slope and shape of the yield curve; from a methodological point of view it is not sound to combine a measure that is based on a parallel shock of the yield curve (NII measure) with the basis risk measure that is related to a non-parallel shock of the yield curve;
3. The CD (p. 7/8) defines three different types of basis risks (reference rate basis risk, tenor basis risk, currency basis risk), but requires basis risk measurement only for two basis risk types (reference and tenor basis risk). The CD does not give an explicit rationale for the exclusion of currency basis risk;
4. Administered rates should be excluded from the basis risk approach.

Ad 5. Fixed rate loan commitments need clarification

The CD (p. 25) defines fixed rate loan commitments as commitments where the borrower is entitled to draw down a credit line up to a specified amount, at a fixed rate, for a specified term, at any time within a specified period. Such products are included in the framework to capture the uncertainty surrounding the pull-through ratios.

The definition given in the CP can be read in various ways as specifying either a. the conditions of the drawdown phase (i.e. the OBS-product) or b. those of the phase after the
drawdown period (i.e. the subsequent on-balance sheet product) or c. both. Depending on
the interpretation the resulting scope and product relevance for banks will deviate
substantially. Without further guidance different banks will interpret this section in a
different way. This in turn will lead to inconsistent capital charges.

More specifically it is unclear:

- Does the term “at a fixed rate” determine the rate of the OBS-product, the rate of the
  on-balance sheet product or both?
- Does the term “at a fixed rate” only cover fixed rate loans or are index-based loans
  (e.g., EURIBOR-linked loans) also covered?
- Does the borrower have to draw the full amount until the end of the drawdown period
  or is he flexible to draw only portions of the commitment or even nothing? Are lines
  where the borrower has to draw in full excluded from the framework due to lack of
  uncertainty?
- Is the borrower free when and to what extent he draws the line at a certain point in
time? Are lines where the drawdown-schedule is fixed excluded from the framework?

Furthermore, interpretation is that the length of the drawdown period is fixed (e.g., 12
months) so that there is no uncertainty around this feature. Further understanding is that the
term “for a specified term” refers to the on-balance sheet product only.

**Ad 6. The treatment of automatic options is burdensome and not in line with current risk
management practices**

The approach of generally treating non-retail behavioral options as automatic options (section
2.7) is overly conservative. Depending on the product and the customer type wholesale
customers tend to behave more like retail customers and should be treated accordingly in the
framework. It is understood that the approach chosen by the BCBS aims at reducing modelling
complexity, still the approach is not risk-sensitive and does not reflect actual behavior of
many non-retail customers.

In general, the scope of section 2.7 is too broad as it requires any option embedded in
banking book positions to be captured separately. This will be a high-effort, burdensome
exercise with potentially limited added value. Beside more common features like
straightforward cancellation rights there might be more individual, country-specific cases
that will be difficult to grasp and require a lot of manual work due to the lack of IT support.
An example are legally prescribed caps and floors embedded in loan products. For instance, in
Croatia, for mortgage loans, the interest rate must not exceed the average weighted interest
rate on mortgage loans in Croatia, increased by 1/3; the effective interest rate cannot
exceed a legally defined default rate calculated as an average interest rate on loans granted
to companies with maturity above 1 year; for FX mortgage loans, in case of an increase of the
spot rate by more than 20% compared to the spot rate on the date the loan was granted, a
cap on the interest rate is triggered which limits interest rate to the average weighted
interest rate published by the Croatian National Bank, decreased by 30%; this cap is valid
until the period of 30 days is reached during which threshold of 20% increase in spot rate has
not been exceeded.

Furthermore, it is unclear if the 0%-interest rate floor embedded in many banking book
products due to the current negative interest rate environment in the EU would have to be
captured.
Part 3 - Austrian/CEE-specifics

Part 3 addresses some more prominent specifics of the Austrian market/CEE regarding IRRBB with a view to give concrete evidence on the drawbacks of a standardized IRRBB framework proposed by the BCBS. Part 3 addresses the following topics.

1. Standardized treatment of positions linked to SMR/UDRB or CMS (Austria) is inadequate
2. Standardized treatment of positions linked to NRS (Croatia) is inadequate
3. Lack of longer-term hedging tenors in CEE jurisdictions

Ad 1. SMR/UDRB-linked Positions cannot be adequately captured in a standardized IRRBB framework

The index “average government bond yields weighted by outstanding amounts,” referred to by its German abbreviation UDRB (for "Umlaufgewichtete Durchschnittsrrendite für Bundesanleihen") depicts the average yield of outstanding EUR-denominated Austrian central government bonds issued under Austrian law with a fixed coupon and a remaining maturity of more than one year. The UDRB thus reflects the yield of Austrian central government bonds in the secondary market, serving as a capital market interest rate in addition to the short-term money market interest rate. The UDRB has its legal basis in the federal act on the determination of weighted average yields on government bonds (German abbreviation: UDRBG). The UDRB values are to be calculated and officially published weekly by OeNB, one of two Austrian banking supervisory authorities.

The UDRB was introduced in 2015 fully replacing the so-called “SMR” (Secondary Market Yield, in German “Sekundärmarkentreidite”). The SMR was defined in a very similar way and was a very well-known, very well established and wide-spread reference interest rate metric in the Austrian market for many years.

High materiality and relevance of SMR/UDRB in the Austrian banking market stem from the fact that these metrics are widely used by Austrian banks as a capital market reference interest rate in their (retail) loan contracts.

From an IRRBB perspective, such SMR-/UDRB-linked positions are difficult to manage and hedge due to the fact that the reset date/frequency (which is typically monthly or quarterly) and the interest reference rate (which is typically an average long-term, e.g., 5 yrs) deviate materially. Normally, there is a match between reset date and reference interest rate (e.g., 3m-Euribor resets quarterly, 6m-Euribor reset bi-annually, etc.). Deviations between reset date and interest rate require specific modelling and hedging strategies in order to adequately capture the specific IRRBB risks that arise from such deviation and are inherently associated with SMR-/UDRB-linked positions.

Within a standardized IRRBB framework that by definition would not give guidance to local specifics, such SMR-/UDRB-linked positions would have to be mapped to short-term time buckets in accordance with the reset date. Such mapping would not at all reflect the economic interest rate risk resulting in a material deviation between true risk and the regulatory prescribed risk.
The issue described above holds for all positions where material deviation between reset date and reference interest rate period typically exists, i.e., CMS positions (CMS: Constant Maturity Swap).

**Ad 2. SMR/UDRB-linked Positions cannot be adequately captured in a standardized IRRBB framework**

Similar issues exist in CEE jurisdictions, for example Ukraine and Croatia. For instance, for Croatia, loans are linked to “NRS”, which is calculated as the average cost of funds of the Croatian banking sector. Again, the (short) reset frequency (e.g., semi-annually) differs from the (much longer) reference interest rate. A time bucket mapping according to the reset frequency (as prescribed by a standardized IRRBB framework) does not capture interest risk adequately, as actual interest rate sensitivity of such loans corresponds to the NRS interest rate sensitivity. NRS-linked positions are of high materiality in Croatia with NRS being the relevant interest rate adjustment clause for the vast majority of retail loans. A standardized regulation would be at odds with internal management practices where such specific risks are addressed and captured in line with economic risk.

**Ad 3. Standardized NMD modelling poses serious problems for CEE jurisdictions due to lack of appropriate hedging instruments**

We follow up on Part 1 / Topic 4 (NMD modelling) where it is discussed that NMDs are modelled according to actual customer behavior and monies invested in long-term assets with asset-side duration largely matching the modelled NMD duration. In case NMD modelling is artificially shortened by a standardized framework a mismatch between asset and liability side will result that can be balanced by either shortening the asset side (typically longer-term strategy) or entering into hedge transactions (typically shorter-term strategy) to avoid open risk positions.

With respect to explicit hedging, such strategy will not be implementable in some less developed (e.g., CEE) markets simply due to the unavailability or limited availability of appropriate hedge instruments (in terms of both tenor and volume). Consequently, through standardization, banks would end up with an undesired open risk position without being able to take appropriate mitigating action. This is against the idea of a level playing field with banks being severely penalized purely because they are operating in a certain jurisdiction.

Please give our concerns due consideration.

Yours sincerely,

Dr. Franz Rudorfer
Managing Director
Division Bank and Insurance