

A. Introduction

Deutsche Börse Group (DBG) welcomes the opportunity to comment on BCBS consultative document "Interest rate risk in the banking book" issued in June 2015.

DBG is operating in the area of financial markets along the complete chain of trading, clearing, settlement and custody for securities, derivatives and other financial instruments and as such mainly active with regulated Financial Market Infrastructure providers.

Among others, Clearstream Banking S.A. (CBL), Luxembourg and Clearstream Banking AG (CBF), Frankfurt/Main, who act as (I)CSD¹ as well as Eurex Clearing AG (ECAG) as the leading European Central Counterparty (CCP), are classified as credit institutions and are therefore within the scope of the European Capital Requirements Directive (CRD) and Capital Requirements Regulation (CRR) which transposed i.a. the Basel III rules into European law. Clearstream subgroup is supervised on a consolidated level as a financial holding group.

However, all our group entities in scope of CRD/CRR and therefore Basel III rules are offering limited banking activities ancillary to their function as Financial Market Infrastructure (FMI). In order to operate as a FMI and in line with the dedicated regulatory framework (e.g. CPSS-IOSCO principles for financial market infrastructures as of April 2012) as well as generally recognised business practices, the business models of our group entities are risk averse. None of our entities is performing proprietary trading in order to gain trading profits; some of them are purchasing securities only for intended long-term investments and might enter into a few derivatives positions for limited hedging purposes only.

Beside CBL, CBF and ECAG the group companies European Commodity Clearing AG (ECC) as a CCP and LuxCSD S.A. as a CSD are affected by changing banking rules as they are regulated under EMIR² and CSD-R³ and their respective level 2 standards. Although general banking rules are not directly applicable on pure CCPs and CSDs the capital framework for banks is the basis for the calculation of their own

¹ (International) Central Securities Depository

² Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories

³ Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directive 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012

funds requirements in the EU. Taking this into consideration we urge the BCBS to diminish spill-over effects of their regulations imposed on banks onto other regulated entities into account.

Due to our business model and balance sheet structure we have only minor interest rate or market risk in the banking book and no trading book according to the current definition. The only balance sheet positions with interest rate risk (in the sense that the value of the positions are responding to interest rate shifts) are own funds invested in securities (mainly debt securities, including fixed coupon and floating rate bonds, notes and bills) and issued commercial papers (CP) to enhance own liquidity position. Deposits are invested on short term basis in the money market or used for liquidity positions on accounts whereas respective interest rate risk is isolated on net interest income (NII).

Our response to the consultation is reflecting on proper own funds requirements for banking book positions. Having said this we noticed that the BCBS is putting the current consultation in close context to the ongoing revision of the trading book and market risk framework which in fact requires that our response also needs to cover those aspects⁴.

The document at hand contains a management summary in part B and specific comments in part C.

⁴ We have clearly opposed certain BCBS proposals to change the banking book / trading book boundary definition which potentially shifts part of our liquidity portfolio into the banking book (see our response to the BCBS consultation paper BCBS 265 in this regards: <http://www.bis.org/publ/bcbs265/deutscheboersegroup.pdf>). We continue to see the trading intent as the driving key to allocate positions to the trading book. We further refer to our BCBS response on the BCBS discussion paper "The regulatory framework: balancing risk sensitivity, simplicity and comparability" issued in July 2013: <http://www.bis.org/publ/bcbs258/deutschebrsegro.pdf>

B. Management Summary

As the current framework to handle interest rate risk in the banking book dates back to 2004 a review seems to be appropriate. However, we have not identified fundamental weaknesses of the current approach but do not exclude small adjustments and calibrations. Especially in the financial crisis those interest rate risks did not play an essential role. We therefore do not see the reason to substantially change the treatment of interest risk in the banking book and especially the allocation of (massive) increased of capital charges to that risk is seen critical. Amending the whole framework for the only reason to take care of current and temporarily circumstances is not appropriate.

In line with the general BCBS guiding principles as formulated in the discussion paper "The regulatory framework: balancing risk sensitivity, simplicity and comparability"⁵ we want to point out that stability in the industry with regard to the regulatory framework is also needed⁶. As such we urge the BCBS once more to consider carefully whether amendments in the framework are necessary for the currently discussed topics but also more in general. We do not support the generic statement that a common Pillar I approach for interest rate risks in the banking book would have the benefit of promoting greater consistency, transparency and comparability. The structures of banking books, interest rate ladders and maturity transformations differ between different banks to a very large extend. Application of standardised rules (via a Pillar I) instead of tailor made rules (via a Pillar II approach) does not seem to be the best way to capture/acknowledge interest rate risk in the banking book.

In line with our former statements on other BCBS consultations we urge the BCBS not to overpower banks with regard to capital requirements and their management.

The risk of potential losses as a consequence of increasing interest rates is the core driver behind the amendments for interest rate risk in the banking book. In our view this has also been the driving force of the current framework already back in 2004. Nothing has changed in this respect compared to 2004. However we acknowledge that in general market conditions and interest rate levels are fundamentally different than in the late 20th century and in the early years of the 21st century. Therefore the global interest rate levels are far lower than they used to be. According to our under-

⁵ See <http://www.bis.org/publ/bcbs258.htm>

⁶ See our response to the consultation under: <http://www.bis.org/publ/bcbs258/deutschebrsegro.pdf>

standing there is little likelihood that interest rates will reach levels being extremely higher than current levels. We recognise that from the current levels close to zero percent expected increases over the next years of maybe 200 bps are relatively huge but not on an absolute scale. Many factors, e.g. demographic trend, oversupply in commodities, high sovereign debt levels (political pressure to keep interest rates low), low economic growth, etc., may be also good reasons to expect stable or maybe even further decreasing interest rate levels.

We in any case disagree that this leads to more extreme interest rate movements. Finally we disagree to the necessity to adjust the model only due to the fact that interest rate situation is at a dedicated point of the normal interest rate fluctuation.

We reject the overall reasoning of BCBS as it doesn't seem to be appropriate to adjust the overall framework which shall be applicable for quite some time (in the sense of decades rather than years or even only months) to cover an isolated (current) situation. The overall framework must be fitting on a variety of scenarios. In case market conditions change massively (market disturbances) this must be tackled by isolated supervisory measures instead of adjusting the whole framework.

As a matter of fact the calibration of the model has been done in the past based on historical data which showed as stated above much higher interest rate levels. Therefore we accept this as one reason for adjusting – but not reviewing in its entirety – the IRRBB framework with regard to calibration of certain elements of the 2004 principles.

We agree that (market-) risk, also in the banking book, must be appropriately covered. In this context “appropriate” should be understood in the sense that different business models and different balance sheet structures lead to different interest rate sensitivities. Trying to regulate this via a standardised capital regime doesn't seem to be the best solution. Further we urge the BCBS to rely on quantitative data when creating interest rate shock scenarios.

This framework should only cover market risks instead of credit risks. Banks holding debt instruments with the intention to hold them long-term, even to maturity in order to keep a liquidity buffer and earn reasonable interest (no trading intent) would in principle not suffer from raising interest rates. They might even have lower re-investment risks and could expect higher interest income. Taking these aspects into account possible interest rate shock scenarios should be calibrated with reasonable caps and floors.

The second reason, limiting incentives for capital arbitrage between the banking book and trading book, is supported without limitation. Nevertheless in case banks have sufficiently proven in the past and have good reasons and arguments to have positions in the banking book it must be possible for supervisors to accept the banking book classification without additional capital charges.

Setting up a one-size-fits-all framework for simulating NII in order to have a comparable approach is even impossible due to different characteristics of banks. Different currency exposures, maturity transformations, funding sources etc. lead to the fact that different banks are differently affected by interest rate movements. This would be another strong argument to have a Pillar II approach instead of Pillar I with regard to capital charges.

The mentioned benefit of promoting greater consistency, transparency and comparability is not mutually exclusively linked to a Pillar I approach as mentioned in the executive summary of the consultative document. We prefer an approach that is treating all banks with the same principles rather than a detailed set of formulas. Therefore we have a preference for a Pillar II approach to cover market price risks in the banking book. Nevertheless organisational and governance requirements should be set reasonably without overwhelming efforts for banks. In particular proportionality must be taken into account as those requirements might be highly burdensome for smaller banks.

The BCBS strengthened the capital framework with the introduction of the Basel III framework. In addition and beside this consultation the BCBS is performing a variety of reviews with regard to capital regimes, e.g. fundamental review of the trading book, revision to the Standardised Approach for credit risk, capital floors, revisions to the securitisation framework, operational risk requirements, etc. For the foreseeable future many other initiatives, e.g. the treatment of exposures towards sovereigns and central banks, total loss absorbing capacity, replacement of the current exposure method by the non internal model method, etc. are already announced to be on the agenda. While we understand that every single initiative might have its justification we urge the BCBS to summarize these initiatives in a "Basel IV" framework that is publicly named like this in order to raise the necessary attention. In this process the interaction of these initiatives should be assessed and cumulative capital requirements calibrated. Otherwise capital requirements are geared up heavily as several capital requirements depend on others. The variety of initiatives to cover risks via

capital requirements might appear as appropriate on an isolated basis but their accumulation leads to a situation that banks are heavily restricted on their ability to grant loans to the real economy. We ask to take these aspects into consideration and assess what risks might be covered multiple times by capital requirements and especially capital buffers.

Further details see argumentation in part C.

C. Specific comments

The BCBS is discussing whether a Pillar I or Pillar II approach would be most accurate for covering IRRBB. In this regard we want to urge the BCBS to stay with the current Pillar II approach accompanied with limited amendments if needed to reflect necessary calibration of the model and to avoid undue behaviour of market participants. We do not share the statement that a common Pillar I approach would have the benefit of promoting greater consistency, transparency and comparability. The structures of banking books, interest rate ladders and maturity transformations differ between different banks to a very large extent. Application of standardised rules (via a Pillar I) instead of tailor made rules (via a Pillar II approach) does not seem to be the best way to capture IRRBB. Having a commonly applied framework on all types of credit institutions does not create an appropriate framework as underlying risks are way too heterogeneous. Competent authorities must have a sufficient level of discretion when dealing with the interest rate risk in the supervised credit institutions. The described method for Pillar I only addresses IRR on the "risk free" interest rates (see p.14), whereas the one for Pillar II would also have to deal with credit spread risks as well. We see no good reason to have this deviating treatment.

In 2013/2014 the BCBS consulted a revised market risk framework (BCBS #265). Although the final framework for market risk is not yet published the BCBS gives the impression in the consultation paper to pursue the revised boundary of the trading book as proposed by the BCBS in the mentioned consultation. In order to prevent regulatory arbitrage (designate origin trading book positions to the banking book leading to lower capital requirements and flatter p&l) the proposed changes by the BCBS to allocate certain positions to the trading book per-se, even if no trading intent is given. In addition certain qualitative criteria are supposed to be introduced as well.⁷ No instrument that is bought without trading intent should be allocated to the trading book. We want to stress that some of the ideas brought forward in BCBS #265 are providing wrong incentives for behaviour on financial markets and an allocation to the trading book per-se only for the purpose to set capital charges for assumed market- or interest rate risk as a pillar I measure in our view is not appropriate. Consequently we disagree to the approach that by shifting certain instruments by default into the trading book the treatment of interest rate risk follows Pillar I and is therefore not

⁷ We have brought forward our concerns to the proposal and proposed alternatives in our comment on the consultation, see <http://www.bis.org/publ/bcbs265/deutscheboersegrouppdf>

dealt any longer under interest rate risk in the banking book. We clearly expect that interest rate risk in the banking book is covered via the approach currently consulted and not just shifted to the trading book. In this regard we renew our criticism on the approach as proposed in BCBS #265. All our comments below therefore include any interest rate risk position entered into without trading intent which is not to be allocated to the trading book. We indeed disagree to the approach of the BCBS (not just with this consultation) to discuss isolated matters which can only be judged in combination. As such we strongly urge the BCBS a) to consult on the combined approach for trading book and market risk in combination with interest rate risk in the banking book backed by proper quantitative data for any proposed change in rules and b) to consult on the overall changes for the capital charges in a comprehensive manner in order to introduce a revised banking framework. Taking into account BCBS #265 / d305 and the current consultation we are expecting at least a further consultation with the combined proposal for market risk in the trading book and interest rate risk in the banking book in due course.

In the following we want to summarize our feedback and concerns:

I. Comments with regard to Pillar I approach

§ Gearing up of capital requirements must be prevented. The Basel III framework already introduced additional capital requirements for a variety of risks, e.g. CVA charge for OTC traded derivatives or CCP counterparty risk. On top several capital buffers were introduced. Once the Basel III rules are fully phased the qualitative requirements on the single capital components (Common Equity Tier 1, Additional Tier 1 and Tier 2) are tightened and in addition the composition of capital components must be of significantly higher quality (e.g. minimum 4.5% CET1 instruments instead of 2.0% CET1). Furthermore, capital buffer requirements have been introduced.

Since the release of the Basel III rules in 2010, further initiatives to enhance the capital framework for banks have been triggered, e.g. revision of the Standardised Approach for credit risk, the fundamental review of the trading book, etc. Further initiatives are announced, e.g. the treatment of sovereigns- and central banks exposures in the solvency framework or capital requirements for operational risks. As these initiatives are mostly cumulative we urge the BCBS to calibrate all these initiatives in their entirety to prevent overwhelming capital require-

ments that lead to malfunctioning credit supply for the real economy. Even worse is the fact that several capital requirements are built up on each other as one is the basis of another (the Revision of the Standardised Approach leads to higher basis for the calculation of capital buffer requirements).

A consistent framework must take into account all risks, but also possible correlation effects.

- § The capital requirements have been fixed at 8.0% of total risk exposures and the various elements have been calibrated on that basis. This benchmark has already been used in the Basel I framework with only very few standardised parameters. As a guiding principle of Basel II more risks have been individually captured and the risk sensitivity of the framework has been enhanced. However including the introduction of the capital charge for operational risk the overall solvency ratio of 8.0% has been maintained on purpose and the individual parameters have been calibrated to reach this. With Basel III additional risk components have been added (CVA charge, CCP counterparty risk, etc.) without questioning the overall level of 8.0% of total risk exposures but also without recalibrating the overall model. Nevertheless all other risks not specified individually are still supposed to be covered within the framework. Moreover, a variety of capital buffers have been introduced which may be underrun in times of stress mainly to cover unexpected shortfalls of equity or increased risk positions within the given framework and not to cover additional risk categories. Only to some extent the buffers for systemically important banks (and in the EU the buffer for systemic risk) could be seen as a kind of capital coverage for risk categories not captured so far.

Based on the above we do not agree that there is a need for higher capital levels, if so, we would expect that this is clearly addressed and the common rate of 8.0% is shifted upwards.

To be precise: We disagree to changes which lift up the overall capital levels above 8 % and continue to believe that:

- a) the current level of 8.0% of total risk exposures is the accurate level;
- b) the introduction of any form of leverage ratio as a binding measure is not appropriate and
- c) even for recovery purposes increased capital requirements massively above the 8.0% of total risk exposures are questionable.

On this basis the capturing of additional risks in Pillar I should only occur when recalibrating all risks at the same time.

For debt instruments held in the banking book credit risk dominates market risk. Based on the proposal the capital charge for interest rate risk in the banking book might be a multiple of the capital charge for credit risk (as many of the respective instruments have a 0% or 20% risk weight). In contrast to the economical risk the charge for market risk would exceed credit risk in these cases based on the proposal. Therefore the proposed model in our view is representing the risk in imbalance to the economic risk situation. Weighting capital requirements for interest rate risk in the banking book (market risk with regard to interest rate movements) with 100% of possible capital shortfall by deduction (of worst shock scenario) while credit risk of these assets is mostly 0% or 20% (times 8.0% times nominal) doesn't seem to be consistent and should be reassessed.

- § The proposed framework identifies two main drivers in IRRBB. First, the economic value (EV) and second NII. Every shift in interest rates or other stress scenario increasing interest rates have implications on the (market) value of securities in the banking book (EV) and in principle on the (future) NII. Depending on the investment policy and funding structure one of these two factors dominates the other. Normally the movements in EV dominate movements in NII. However, depending on the structure there may be banks where changes in interest rate levels are predominantly reflected in an increased NII due to the business model. In case the NII is dominating - as the banking book volume is relatively low and most positions are deposits - , it must be considered to assess interest rate risks in conjunction.

Beside our general criticism and rejection of a Pillar I approach we want to comment on technical issues and detailed needs for adjustments if Pillar I approach is nevertheless followed:

- § The Basel III framework introduced more specific requirements to manage the short term liquidity. For coverage of net cash outflows banks must have a sufficient stock of high quality liquid assets (HQLA). The intention to simulate interest rate shocks and force banks to cover the possible losses with own funds leads to a situation that compliance with a certain regulatory regime (in this case LCR) is creating negative effects within another regulatory regime (IRRBB).

The situation is even worse if banks include another internal buffer in their liquidity management in the sense that the LCR is well above 100%. If banks acquire available-for-sale assets to maintain their liquidity position it is not their intention to gain profits by market movements of these assets. Therefore banks should not be charged with capital requirements for interest rate risk in the banking book with regard to these HQLA assets. Beside, those HQLA must fulfil many requirements to be considered HQLA at all. Two main criteria are that those assets entail very low levels of credit risk and low levels of market risk, especially in stressed market conditions. Most of these assets (in particular level 1 assets) are seen as "safe haven". In situations of upward shocks in interest rates those assets do not suffer the same market price reactions as lower quality instruments. **Applying extreme shocks on these assets would be highly inconsistent with assumptions on these assets in the LCR regime and therefore questioning the existence of HQLA in total.**

In our opinion the liquidity situation is by far more important than interest rate risk in the banking book which was not a major problem in the financial crisis. Therefore we kindly ask for an exemption for HQLA under IRRBB regime. This shows another good reason not to have a Pillar I approach for interest rate risk in the banking book.

- § Beside those HQLA other assets might also be considered as safe haven for liquidity purposes and should therefore be treated accordingly. Applying a common interest rate shock on all classes of instruments in the banking book does not seem to be the most accurate way. Applying the same interest rate shock scenario without considering aspects that have an impact on the market price of these instruments doesn't seem to be appropriate. We propose to apply different interest rate shocks depending on the exposure classification in the solvency regime. Assets with lower levels of credit risk and therefore linked with lower capital charges might be exposed with smoother shock scenarios. With such approach the gap between the capital charges for credit risk and capital charges for interest rate risk in the banking book can be appropriately diminished (as many high quality debt instruments have a 0% risk weight in the solvency regime).
- § Another issue that requires a specific treatment are securities in the banking book which are already sold via forward sale. In such cases there is no risk inherent if interest rates are increasing as the liability is not denominated in cash rather than

the security itself. Contrary if securities are bought via forward the interest rate risk applies as price deviations have direct implications on the EV.

- § Stress scenarios must honour interest rate structures. Simulating the same shock scenarios on different banks irrespectively of their balance sheet structure, interest rate sensitivities, natural hedges etc. doesn't seem to be appropriate. Especially if the worst out of six scenarios is applied. The probability is very high that the most ineffective and less fitting stress scenario will have the highest outcome. Applying the average of all six stress scenarios or median of the six stress scenarios (average between the third and fourth highest value) would be reasonable and prevent a situation in which capital charges for IRRBB depend on "black swan" incidents.
- § With regard to the holding period of six months (see p. 16 in conjunction with p. 56) we propose to apply different holding periods depending on remaining maturity brackets of the (sub-) exposure. Two different holding periods for short- and long-term exposures could be defined with a shorter holding period for the shorter exposure bracket:
- o If the remaining maturity of the exposure (time to the next interest rate adjustment/fixing) is below 12 months the holding period shall be 3 months;
 - o If the remaining maturity of the exposure is above 12 months the holding period shall be six months.

With this adjustments banks that are mainly invested in (or funded by) floating / short-term debt instruments are captured more accurately.

- § The application of a 500 bps interest rate shift cap as shock scenario does not seem to be realistic, at least for major trading currencies (e.g. USD, EUR, JPY, AUD, GBP and CHF). The definition of the cap should be closely related to observed interest rate volatilities of e.g. 20 years time horizon or another reasonable horizon. The maximum interest rate volatility of any one year intercept in this period should serve as an indication. The derived cap may be back-tested and calibrated by the BCBS once in a while using the same methodology.
- Further, due to financial innovations a dramatic increase in interest rates must not be expected. We urge the BCBS to introduce a second supplementing set of dynamic caps and floors to calibrate those further depending on current interest rate levels.

A possible floor would be an interest rate shift downwards to 0.00% with regard to future NII. A possible cap for interest rate shifts with regard to EV might be a certain multiple of current interest rates, e.g. 2.

II. Comments with regard to Pillar II approach

Compared to the Basel II framework and the "Principles for the Management and Supervision of Interest Rate Risk", which set only generic requirements and a recommendation to have IRRBB covered via a Pillar II approach unless competent authorities identified a considerable heterogeneity across their banking population, the proposal of the BCBS is increasing the granularity of requirements significantly.

We accept the need for sophisticated regulatory regimes but kindly ask the BCBS to have simplicity and proportionality in mind as well. The proposed set of requirements might fit for banks with a huge securities portfolio in the banking book but may be overwhelming for deposits and loan granting driven or even smaller banks performing lower risk business with local clients. Although we clearly understand the Basel rules are only tailored for internationally active banks we urge the BCBS to be outspoken that the implementation for smaller banks should be in line with the principle of proportionality once implementation on a single entity or even national level. Our concern therefore is also true with regard to the application within internationally active banking groups for smaller banks being part of those groups.

We therefore propose to limit the following requirements to the highest consolidation level and to systemically important banking entities of such groups.

§ In the second principle banks are required to assess the level and trend of interest rate risk exposure more frequently where the bank runs significant IRRBB positions or significant positions in complex IRRBB instruments. In order to prevent any misinterpretations we kindly ask the BCBS to define the term "significant" in this regard.

In addition banks shall have their IRRBB identification, measurement, monitoring and control processes reviewed by an independent party (e.g. internal or external auditor) on a regular basis. We propose to introduce an annual frequency which would give the option to link this to the annual audit by the statutory auditor.

§ In principle 4 the interest rate shocks are listed a bank shall perform. Beside internally selected shock scenarios and shock scenarios required by supervisors,

banks shall perform the six interest rate shock scenarios proposed under the discussed Pillar I approach. We feel tailor made shock scenarios as being more appropriate and taking into account the already existing one partially determined by supervisors we see no necessity to force banks to apply the common shock scenarios under Pillar I in addition. This is explicitly true for the application of all or even the majority of scenarios. In case certain of these scenarios are considered appropriate supervisors are able to demand them, an automatism is neither necessary nor appropriate.

The current proposal would mean that results from two separate approaches (internal and standardised models) would have to be used compared to currently one (only). This implies that the fall-back standardised model including the six stress test scenarios must be developed and maintained on top of the existing internal models along with the stress test requirements for the internal models as stated under principle 4. The bank's risk profile, its business model and the complexity of its products are not taken into account in the standardised methods. It follows that it is highly plausible that the internal and the standardised models deliver different results. As based on the proposals the results of the IRRBB assessment will be publicly disclosed in the Pillar III report, it will be difficult for the public to determine which result is reflecting the appropriate IRRBB figure for the bank, certainly if the differences are substantial. The outcome from the fall-back standardised model might not be directly comparable across jurisdictions as national supervisors will be given the possibility to calibrate shock scenarios for their domestic currency. All banks must disclose the results of their internal models for quantification of IRRBB without taking into account whether the IRRBB is significant for the bank or not. Imposing this requirement for all banks creates new efforts required in an environment where banks already have severe problems to build up qualified staff. Competent authority shall have discretion to ease this requirement.

We hope that our comments given are useful in the further process and are taken up going forward. We are happy to discuss any question related to the comments made.

Eschborn, 11 September 2015

Marcus Thompson

Jürgen Hillen